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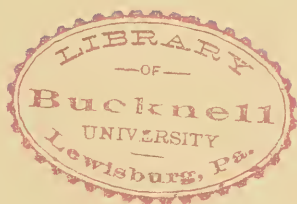
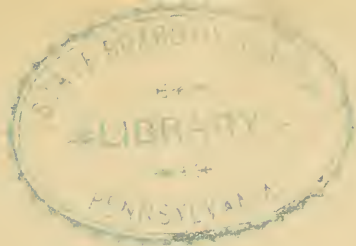
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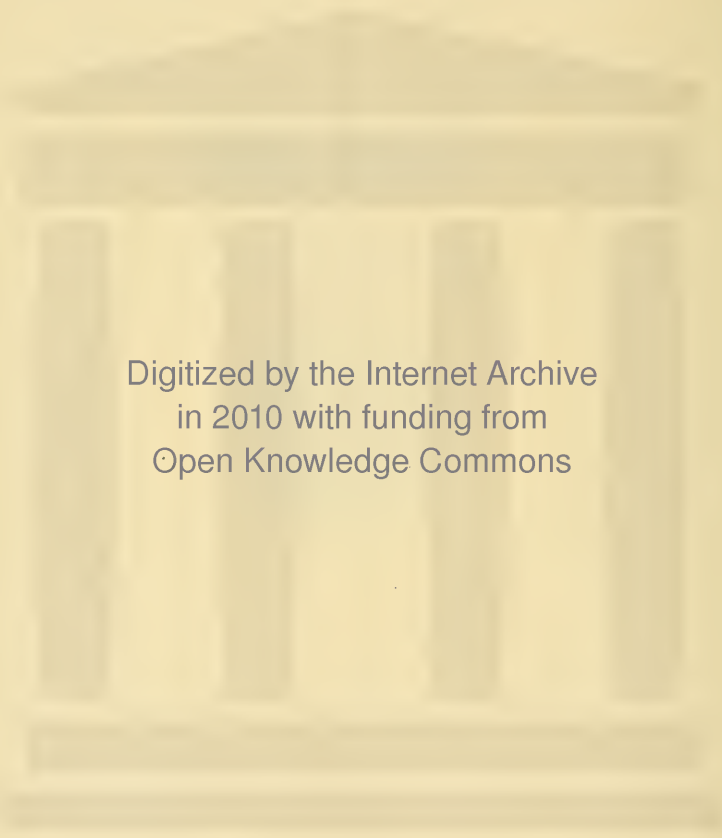
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FIFTEENTH

ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH

OF INDIANA

FOR THE

FISCAL YEAR ENDING OCTOBER 31, 1896.

TO THE GOVERNOR.

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.

1897.

STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
INDIANAPOLIS, January 5, 1897. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

MYRON D. KING,
Private Secretary.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, January 5, 1897. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

A. C. DAILEY,
Auditor of State.

JANUARY 5, 1897.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

MYRON D. KING,
Private Secretary.

Filed in the office of the Secretary of State of the State of Indiana, January 6, 1897.

WILLIAM D. OWEN,
Secretary of State.

Received the within report and delivered to the printer this 6th day of January, 1897.

THOS. J. CARTER,
Clerk Printing Bureau.

FIRST QUARTER.

MEMBERS OF THE BOARD.

DOUGLAS C. RAMSEY, M. D., President,	-	-	-	-	-	-	Mt. Vernon.
L. L. WHITESIDES, M. D., Vice-President,	-	-	-	-	-	-	Franklin.
J. N. HURTY, M. D., Secretary,	-	-	-	-	-	-	Indianapolis.
T. HENRY DAVIS, M. D.,	-	-	-	-	-	-	Richmond.
JOHN H. FORREST, M. D.,	-	-	-	-	-	-	Marion.

STATE BOARD OF HEALTH REPORT.

HON. CLAUDE MATTHEWS,
Governor of Indiana:

The State Board of Health herewith submits its Fifteenth Annual Report for the Board year ending September 30, 1896. No report was made for the statistical year ending September 30, 1895. This was due to the death of the then Secretary, on March 12, 1896. At the time of his demise the report for the last mentioned period was far from complete, and the present Secretary failed to find all of the data necessary for completion. It was, therefore, determined to include in the report for 1896, the matter composing the partially finished record for 1895. This makes up the appendix to the present volume.

This Board has both a statistical and fiscal year. The first ends September 30, and the second ends October 31. The financial exhibit is given first and covers the entire fiscal year without being set forth in yearly quarters. The account of the proceedings and acts of the Board are set forth in yearly quarters, in the order in which they actually occurred.

Under miscellaneous, there is given special reports on the sanitary condition of the counties of the State; special reports of the city crematories at Richmond, Ft. Wayne and Terre Haute; special reports on the public water supplies of all cities and towns having water works, and a full account of the water and vinegar analyses made, together with the microscopical diphtheria examinations.

The vital statistics are given in tabular form. The same arrangements used in former reports being retained. We are impelled by common honesty to say that the records of births and deaths as here given have scarcely any value. This is because the law under which the work is done is inadequate in almost every particular.

Until a proper statute is enacted this highly valuable and important State work will be done imperfectly.

A wise health law will save to the citizens of the State several millions of dollars which are now lost through unnecessary disease and death. Recognizing this fact and knowing the inefficiency of the existing law, this Board earnestly recommends the early enactment into a statute of a bill which has been carefully and studiously prepared, and which we believe will be the means of bringing more abundant health and wealth to the people. This bill will be presented to the coming Legislature, and we hope it will not meet with favor unless it plainly appears that it will be the means of saving vast sums of money now needlessly lost through disease and death which might be prevented.

The text of the proposed bill is given herewith.

A BILL for an act entitled an act to provide for the preservation of the public health; for the prevention and suppression of epidemic, contagious and infectious diseases in man and the domestic animals; for the disinfection or destruction of animals, personal property, houses or other structures, when contaminated with or by malignant contagious or infectious diseases, when incapable of disinfection; to provide for the abatement of disease producing or spreading nuisances; to prevent and abate the pollution of rivers, water courses, lakes and springs; to create a State Board of Health Commissioners, defining their powers and duties; providing for the jurisdiction of courts in certain cases, and defining the duties of the Attorney-General, Prosecuting and City Attorneys in relation thereto; for the equipment and maintenance of a State Laboratory of Hygiene; providing for the appointment of certain officers by the State Board of Health Commissioners by the Governor; providing for the appointment of county, city and town boards of health and health officers, defining their powers and duties; providing for the proper health control of the public food and drug supply, for the collection of vital and sanitary statistics; prescribing fines and penalties for the violation of this act, fixing an appropriation for the expenses of the State Board of Health Commissioners, repealing acts in conflict therewith, and declaring an emergency.

SECTION 1. *Be it enacted by the General Assembly of the State of Indiana*, That within twenty days after the taking effect of this act the Governor shall appoint four skilled, reputable practicing physicians, graduates of a reputable medical college, one skilled engineer, who shall be competent in mechanical, civil, hydraulic and sanitary engineering, one reputable practicing

lawyer, and a competent, experienced, reputable graduate in veterinary science, who shall constitute and be a board to be denominated the State Board of Health Commissioners, who shall perform the duties and have the powers hereinafter specified, and whose jurisdiction shall be co-extensive with the State.

SEC. 2. The Governor shall commission the said Commissioners so appointed as aforesaid, and before entering upon the duties of their office, they shall each take and subscribe an oath of office that they will faithfully and honestly discharge the duties of said office, which oath shall be filed in the office of the Secretary of State.

SEC. 3. The members of said Board shall hold their offices as follows: The two members first appointed shall serve and be commissioned for four years; the two members next appointed shall serve and be commissioned for three years; the two members next appointed shall serve and be commissioned to serve for two years, and the one last appointed shall serve and be commissioned for one year. Thereafter, the Governor shall annually appoint a successor or successors to such member or members whose term or terms of office shall have expired, and such member or members so appointed shall be commissioned and serve for four years. Any vacancy in said Board shall be filled by the Governor.

SEC. 4. The State Board of Health Commissioners shall meet once in each month in the city of Indianapolis, and as often as they may deem necessary, and at such other times and places as they may deem expedient during epidemics. A majority shall constitute a quorum for the transaction of business. They shall choose one of their number for president, who shall serve two years, unless his term of office as a member of the Board shall sooner expire. The members of said Board shall receive their traveling and other necessary expenses and a per diem of \$5 00 each while employed on the business of the Board, and no other compensation shall be given to them. Each member shall make an itemized account of expenses before the same may be paid. The Board shall elect a State Health Officer, who shall be Secretary. The said Board shall collect and publish vital statistics, make sanitary investigations and inquiries respecting the cause of disease, the causes of mortality and the effect of localities, employments, conditions, ingesta, habits and circumstances on the health of the people.

POWERS.

SEC. 5. The State Board of Health Commissioners shall be a body politic, and by said name may sue and be sued in the courts of the State, and shall be invested with the police power of the State for the ordaining and enforcement of by-laws, rules and regulations for the preservation of the health of the inhabitants and domestic animals of the State of Indiana; for the prevention of contagious and infectious disease, for the prevention and correction of the pollution of rivers, water-courses, lakes and springs; for the prevention and abatement of nuisances; for the declaration of quarantine against infection and contagion, for the condemnation and destruction of animals infected with glanders, rinderpest, charbon, Texas fever, or other malignant contagious diseases; of personal property likewise infected and likely to spread contagious and fatal diseases; and for the condemnation and destruction of any buildings or lands in case the same are so infected with the germs of the disease of consumption (tuberculosis), diphtheria, leprosy, cancer, small-pox or any other similar infectious or contagious malignant disease that they can not be disinfected; and for the inspection and regulation of dairies, and the condemnation of diseased milch cows. The State Board of Health Commissioners shall have power to regulate cemeteries, burial grounds and interments, may prohibit undertakers, for the purposes of speculation, from using tombs as places of deposit for bodies committed to them for burial; may, if in their opinion the public health requires it, close any tomb, burial ground, cemetery or other place of burial within any city or incorporated town in this State for such length of time as they may deem necessary for the protection of the public health. And for this purpose may adopt by-laws, ordinances and rules, and may establish penalties for any breach of such by-laws, ordinances or rules, not exceeding one hundred dollars. The State Board of Health Commissioners shall have power to adopt health ordinances, by-laws, rules and regulations for the purposes aforesaid, and to provide in such ordinances and by-laws, and in all other ordinances and by-laws, that any person or corporation violating the provisions thereof, or any of them, shall forfeit any sum not less than one dollar nor more than

one hundred dollars for each violation thereof. And such State Board of Health Commissioners shall have power to recover such penalties for the violations of any such ordinances in an action brought in a corporate name of such State Board of Health Commissioners in any court of competent jurisdiction in the State of Indiana. And the practice and pleadings in such action shall be the same as in suits by municipal corporations for the violation of city ordinances, so far as such rules of pleading and practice may be applicable. Such ordinances shall be recorded in a substantial record book, similar in size and quality to a circuit court order book, and shall be published three times in each of two daily newspapers in the city of Indianapolis; and shall be in force after their due publication and recording as aforesaid. A majority vote of the said Board shall be necessary for the adoption of such ordinances and by-laws, which vote shall be entered upon said record along with the record of the said ordinances.

SEC. 6. In addition to the powers conferred upon said State Board of Health Commissioners by this act, the said Board of Health Commissioners shall have power to commence and prosecute in any court having equity jurisdiction in the State of Indiana, any suit or suits to abate or restrain any pollution of any river, water-course, lake or spring from which the inhabitants of any city, town or district of country may derive their drinking water, or considerable portion of the same, against any person, persons, corporation or corporations causing or maintaining any such nuisance or pollution aforesaid, and such courts shall have power in any suit or suits to restrain and abate, or abate such nuisances or pollutions by mandatory injunction. And whenever it shall be the opinion of such State Board of Health Commissioners that the circumstances attending such act or acts of pollution of such river, water-course, lake or spring, are such as to make the cause of general concern to a considerable portion of the people of the State, or to cause epidemic disease, then it shall have power to call upon the Attorney-General of the State of Indiana to prosecute such action in his official capacity, and it shall be his duty to begin and prosecute such suit or suits to final judgment and enforce the same. And such suit or suits shall have precedence over any other civil actions on the docket of any court in which the same may be brought. It shall be the duty of the prosecuting

attorneys of, the several circuits and criminal courts of the State to begin and prosecute all other actions or suits brought by the said State Board of Health Commissioners of this State under the provisions of this act, or for the enforcement of any ordinance or by-laws, rule or regulation adopted by said Board of Commissioners, or for the recovery of any penalty for the violation of the same.

SEC. 7. All by-laws and ordinances for the condemnation of malignantly infected real or personal property shall authorize the State Health Officer, in meritorious cases, in his discretion, to serve a notice upon the owner or owners thereof to appear at a time and place to be named by him therein and show cause why the condemnation and destruction shall not be enforced. If, upon such hearing, the order of the Board to condemn and destroy be confirmed by the Board, then, in case such owner or owners and such Board shall deem it proper to award compensation, and the Board of Commissioners and the owner of such property can not agree upon the amount thereof, then said State Board of Health Commissioners may apply to the Auditor of the county in which such property is situated to appoint three competent and disinterested resident freeholders to appraise such property. It shall be the duty of such appraisers forthwith to qualify by subscribing an oath to be attached to their appraisal, that they will honestly and fairly appraise the property submitted to their valuation, at its fair cash value and as soon as practicable after so qualifying, such appraisers shall proceed to appraise said property and return their appraisal with their oaths appended to the State Health Officer or his deputy in that behalf, who shall certify the sum to the County Board of Health in the county where the transaction occurs for record. Whereupon the County Board of Health may, in its discretion, in meritorious cases of great hardship to the owner of such property, order not to exceed sixty per centum of such appraised value to be paid to such owner or owners of such condemned property: *Provided, however,* That no damages shall be paid to the owner or owners of condemned property who shall have contributed to cause the diseased or infected condition of the property ordered to be destroyed, by his or their willful disregard or violation of the by-laws, ordinances, rules or regulations prescribed by the State Board of Health Commissioners. Such damages so

awarded shall be paid out of the public fund of the county or city in which such property is situated, as hereinafter prescribed: *And provided further*, That such proceedings for the appraisement of such damages and payment thereof shall not delay the destruction of such condemned property. In all cases where damages are awarded to be paid out of the public fund of any county or city by the State Board of Health Commissioners, the local county or city board shall cause a warrant to be issued to the claimant upon the filing with the local county or city board of a certified copy of the order of the County Board of Health for such payment.

SEC. 8. The State Health Officer and Secretary of the Board of Health Commissioners shall be a graduate of a reputable medical college. He shall have made a specialty of the branch of medicine known as hygiene and sanitary science, and shall have experience and skill in sanitary chemistry and bacteriology. His term of office shall be four years, with a salary of a year; and he may be removed from office by the Board for intemperance, inefficiency or insubordination. He shall not practice medicine, nor recommend any person for appointment by the State Board.

SEC. 9. The State Health Officer shall give his entire time to the duties of his office; he shall be the executive officer of the Board, shall keep its records, and perform all the duties of the Secretary of the Board and in accordance with the by-laws adopted by the Board. He shall make reports monthly to the State Board of Health Commissioners in accordance with the rules, regulations and by-laws of the Board, and shall also make a report to the Governor annually for the preceding year, which shall end on the day of in each year. He shall keep his office in the capitol at Indianapolis or elsewhere, as may be provided by law.

SEC. 10. The State Health Officer shall have police powers in all matters pertaining to health of man and domestic animals throughout the State. He may, pursuant to the by-laws adopted by the State Board of Health Commissioners, declare and maintain domiciliary, municipal, district or local quarantine whenever the public health may demand the prevention of the spread of epidemic, malignant, infectious or contagious diseases.

COUNTY BOARDS OF HEALTH.

SEC. 11. The Board of Commissioners in each county in this State shall, at its first meeting after the taking effect of this act, appoint a County Board of Health, to consist of three members, two of whom shall be physicians, graduates of reputable medical colleges and who shall have been actively engaged in the practice of medicine in the county for three years next before their appointment; and the other member of the Board shall be a reputable attorney-at-law, or a competent, experienced, merchant, manufacturer, mechanic, agriculturist, civil engineer or a graduate in veterinary science. The physician first named by the County Board shall hold his office for three years and shall be the County Health Officer and Secretary of the Board; the second for two years, and the other member for one year; and thereafter one member shall be appointed each year, and the term of office thereafter shall be three years. The members of the County Board of Health shall serve without salary, but shall be allowed a per diem of three dollars and necessary traveling and hotel expenses for each day necessarily in attendance on the meetings of the Board, to be allowed by the Board of Commissioners of the respective counties upon the presentation of an itemized statement of the amount, signed by President and Secretary of the Board.

SEC. 12. The County Board of Health shall meet on the first Tuesday of each month at the county seat of its county, and may remain in session two days. In cases of epidemics or emergency they shall be convened in extra session by the County Auditor upon request of the State or County Health Officer.

SEC. 13. The County Board of Health at its first meeting after the appointment of its members shall elect one of its members President, who shall hold his office one year. The Secretary shall, if not already well informed in hygiene and sanitary science, immediately proceed to gain information therein according to the requirements of the State Board of Health, and he shall have police powers in his county in all matters pertaining to the public health.

SEC. 14. The County Boards of Health shall be subordinate to the State Board of Health Commissioners. They shall be

bound by and enforce in their respective jurisdictions, the ordinances, by laws, rules and regulations adopted by the State Board of Health Commissioners. They shall, on or before the tenth day of each month, make a report to the State Board of Health Commissioners for the preceding month of births, deaths, marriages, of all contagious or communicable diseases and such other matters pertaining to the health of the inhabitants and domestic animals of their respective counties as the State Board of Health Commissioners may by by-laws require, and upon such forms as they may adopt, and annually shall make a summary of such reports in a report to the Board of County Commissioners. The County Board of Health may be compelled to perform the duties imposed upon it by this act and by such by-laws as the State Board of Health Commissioners may adopt, by a proceeding for a writ of mandamus by the said State Board of Health Commissioners, in any court of competent jurisdiction in the county of such delinquent Board.

SEC. 15. The County Board of Health shall have power to enforce in their respective counties all the by-laws, rules and regulations of the State Board of Health Commissioners; to abate nuisances, condemn polluted wells, and other local unsanitary conditions. They shall have power to declare and maintain quarantine of diseases dangerous to the public health in accordance with the by-laws of the State Board of Health Commissioners. They may, in times of epidemics of cholera, small-pox or other malignant contagious diseases appoint and fix the pay of special health officers, by and under the directions of the State Board of Health Commissioners; and shall control such officers and prescribe their duties not in conflict with the by-laws, rules and regulations prescribed by the State Board of Health Commissioners.

SEC. 16. The County Health Officer shall be the executive officer of the County Board of Health, and the Secretary of the Board. He shall keep its records, and shall have his office at the county seat. He shall receive for his services a salary of not less than ten dollars a year for each one thousand inhabitants of the county, up to and including one hundred thousand inhabitants, the county contains. The number of such inhabitants to be determined by the annual enumeration of the inhabitants of such county, as determined by the common school enumeration.

SEC. 17. Such County Health Officer shall be the deputy of the State Health Officer in his county, and shall obey and enforce the by-laws, rules and regulations of the State Board of Health Commissioners; and for neglect of such duty or for intemperance or inefficiency he may be removed by the Board of Commissioners of his county upon charges preferred by the State Board of Health Commissioners. In case of such removal, the Board of Commissioners of such county shall at once appoint a successor to such member of the County Board of Health for his unexpired term.

SEC. 18. The County Boards of Health shall appoint in each township a reputable physician, who shall be Township Health Officer for a term of two years. If not already informed in hygiene and sanitary science he shall immediately so inform himself according to the requirements of the State Board. He shall have police powers in all matters pertaining to the public health, and shall be a deputy of the County Health Officer. He shall collect and keep an accurate record of all births, deaths and cases of contagious diseases which may occur outside of the cities and towns in that township in the manner and form prescribed by the State Board of Health. He shall report monthly to the County Board of Health in the manner prescribed by the State Board. The Township Health Officer shall receive quarterly from the county funds ten cents for each birth, death and case of contagious disease reported. He shall receive two dollars for each quarantine established of such diseases which shall be classed as to be quarantined by the State Board of Health. He shall receive ten cents for each burial permit issued, and shall make a full written report of every quarantine he establishes to the County Board before the County Commissioners may issue a warrant upon the county funds for the amount demanded. The County Board of Health may remove the Township Health Officer for intemperance, incompetency or insubordination.

CITY BOARDS OF HEALTH.

SEC. 19. Within sixty days after this act shall have taken effect the Mayor of each incorporated city in this State shall appoint two reputable practicing physicians and one reputable attorney-at-law in actual practice, civil engineer, veterinary

surgeon, or a person skilled in mercantile business and the keeping of accounts, who shall constitute a Board of Health for such city. The one first named shall serve three years, the second two years and the third one year; and thereafter he shall appoint one member each year, who shall serve three years.

SEC. 20. Such City Board of Health shall elect one of their number President, who shall serve three years, unless his term expires sooner. They shall also elect one of the physicians Secretary, who shall serve three years, unless his term expires sooner: *Provided*, Nothing herein shall interfere with any city having a special charter appointing a City Sanitarian. The members of said City Board of Health shall receive no salary, but shall be entitled to receive the sum of two dollars per day each for each day necessarily employed in attending meetings of the Board, to be paid out of the city treasury. Such City Board of Health shall meet once a month, and oftener when the public health may demand it, or when called together by the Mayor of the city.

SEC. 21. The City Board of Health shall have charge of all matters pertaining to the health of the inhabitants and domestic animals within said city, shall be subordinate to the State Board of Health Commissioners, and may adopt and enforce by-laws, rules and regulations relating to the public health of the city not in conflict with the by-laws, rules and regulations adopted by the State Board of Health Commissioners. The City Board of Health shall have power to condemn polluted wells, springs, cisterns, or other polluted water supplies within said city, and for the inspection, regulation and licensing of dairies within said cities, and dairies selling milk within or shipping milk to such city for sale or consumption therein, and the condemnation of diseased animals; may cause nuisances to be abated; may establish and maintain quarantine; regulate the posting and maintaining of notices of contagious and infectious diseases; may prescribe the manner of disinfecting buildings in which contagious diseases have existed; may destroy infected bedding, clothing, carpets and furniture; may provide steam sterilizing machines, approved by the State Board of Health Commissioners, in sufficient numbers to disinfect, when necessary, clothing, bedding and other personal property in said city with superheated steam, or by

other scientific methods approved by the State Board of Health Commissioners; may prescribe rules and regulations governing physicians, nurses and attendants waiting upon persons who may be afflicted with small-pox, diphtheria, measles, scarlatina, cancer, puerperal fever, and other like contagious and infectious diseases, to prevent the spread of such diseases by such physicians, nurses and attendants.

SEC. 22. Any persons violating any by-laws, rules or regulations prescribed by such City Board of Health shall forfeit and pay the city for which said City Board of Health may have been organized, a sum not less than one dollar nor more than one hundred dollars for each violation of such by-laws, rules or regulations, to be recovered by a prosecution in the name of such City Board of Health before the Mayor or Police Judge of such city similar to a prosecution for the violation of city ordinances. And it is hereby made the duty of the City Attorney to prosecute all such actions for the recovery of such penalties; and the pleading and practice in such cases shall be the same as in prosecutions for the violation of city ordinances. And such penalties, when collected, shall be paid into the city treasury to the credit of the General Fund.

SEC. 23. The Secretary of the City Board of Health shall be the Health Officer of such city and command the sanitary police. He shall, if not already well informed in hygiene and sanitary science, immediately proceed to gain information therein according to the requirements of the State Board of Health. He shall have power, at reasonable times, as may be prescribed by the by-laws of the State Board of Health Commissioners, or the City Board of Health, to make sanitary inspection of public or private premises. He shall be the deputy of the State Health Officer in said city, and shall perform such other duties as may be prescribed by the by laws of the State Board of Health Commissioners and the City Board of Health not in conflict therewith. He shall keep the city health records, collect and report vital statistics.

SEC. 24. The Secretary of the City Board of Health shall be paid from the city treasury a salary not less than twenty-five dollars per annum for each one thousand inhabitants of such city. Such salary may be increased in any city of this

State by an ordinance duly adopted by the Common Council and Aldermen of such city, or by the Common Council of cities not having Aldermen.

TOWN HEALTH OFFICER.

SEC. 25. Within sixty days after this act shall have taken effect, the Trustees of each town shall appoint a reputable physician as Town Health Officer for a term of two years. If not already informed in hygiene and sanitary science, he shall immediately so inform himself, according to the requirements of the State Board of Health. He shall receive not less than fifty dollars per annum, and may be removed for intemperance, inefficiency or insubordination. The Town Health Officer shall be paid monthly or quarterly from the town funds by the Town Trustees. He shall have police powers in all matters pertaining to the public health, and shall be a deputy of the County Health Officer. He shall collect and accurately keep a record of the births, deaths and contagious disease which may occur within the town, in such manner, and in such form, as may be provided by the State Board of Health, and he shall enforce all ordinances, by-laws or rules of the State Board. He shall make monthly reports to the County Board of Health in the manner prescribed by the State Board, and shall make an annual report to the Town Trustees.

SEC. 26. No undertaker, sexton or other person shall bury any human body until he has received a permit to do so from the local Board of Health, or its duly appointed agent. No such permit shall be issued until there has been delivered to such Board or agent a certificate of death according to the form prescribed by the State Board, signed by the attending physician, if any, or by the householder, or by the Coroner, or his deputies, of the county wherein the death occurred. In the event of any burial without a permit, as herein provided, the Coroner of the county wherein the burial is made shall exhume the body and hold an inquest, and furnish a copy of the findings to the Health Officer of the township.

SEC. 27. The State Board of Health Commissioners shall establish a State Laboratory of Hygiene and manage the same. It shall consist of three departments, namely, a department of

chemistry, a department of bacteriology, and a department of sanitary engineering.

SEC. 28. The State Board of Health Commissioners shall employ one chemist, who shall be skilled in quantitative and qualitative chemical analysis, one bacteriologist skilled in the use of the microscope, and in the culture of micro organisms. The chemist shall have charge of the department of chemistry, the bacteriologist of the department of bacteriology. They shall also employ an engineer who shall be skilled in sanitary and hydraulic engineering, and in the construction of sewers and plumbing. He shall have charge of the department of sanitary engineering.

SEC. 29. The chemist, bacteriologist and sanitary engineer provided for in the preceding section, shall be employed from among such applicants for said positions as shall have passed a successful examination as to their qualifications and competency to fill their respective positions, before a board of examiners hereinafter provided for.

SEC. 30. After the State Board of Health Commissioners shall have been duly appointed and qualified, they shall notify the Governor thereof, and it shall be his duty to appoint three examiners, who shall be skilled and especially qualified professors, in one or more of the colleges, universities, or educational institutes of this State, of chemistry and bacteriology, and engineering, and they shall constitute a Board for the examination of applicants for the positions of chemist, bacteriologist, and sanitary engineer in the Department of Chemistry, Bacteriology and Sanitary Engineering created by this act. Said Examiners shall hold their offices for four years. Said Board of Examiners shall meet at the office of the State Board of Health Commissioners once a year, upon call of the President of the State Board of Health Commissioners, and hold examinations of all applicants. Said Board of Examiners shall prepare rules for such examination, shall give public notice of the time and place of holding the same, and shall prepare questions for written examinations, as well as for oral and practical examination of the applicants. Each applicant shall be required to present a written application for the position desired by him, in which he shall state his name, age, occupation, residence, education and experience in the science and art of chemistry,

bacteriology, or engineering, and shall give such other information concerning himself as the Board of Examiners may require in the form of application to be prepared by them. They shall furnish applicants printed blanks upon which to make such application. And each application shall be accompanied by a statement signed by two reputable citizens of this State, certifying that the applicant has been known to them for one year next before the signing of the application, that he is a person of good moral character, and that they believe him to be qualified for the position sought by him. The Board of Examiners shall make a separate report upon each applicant who shall pass the examination successfully, to the State Board of Health Commissioners, who shall enter their names, residence, and their respective reports upon a blank book to be provided for that purpose.

SEC. 31. The chemist, bacteriologist and sanitary engineer shall each receive a salary of, and may be removed by the State Board of Health Commissioners for intemperance, incompetency or insubordination.

SEC. 32. The custodian of the Capitol shall provide suitable rooms in the State House for the said State Laboratory of Hygiene.

SEC. 33. The sum of ten thousand dollars is hereby appropriated for the equipment of said Laboratory of Hygiene, subject to the order of the State Board of Health Commissioners, and the sum of twenty-five thousand dollars per annum for salaries and the expense of the State Board of Health Commissioners.

SEC. 34. The said Board of Examiners shall receive a per diem of \$5 each and necessary expenses for each day necessarily employed in and about their duties on said Board.

SEC. 35. Every licensed practicing physician in the State shall report in the form and manner ordered by the State Board of Health Commissioners, to the city, town or township Health Officer in whose district it may occur, all births, deaths, and also all cases of contagious or infectious diseases, classified as such by the State Board, which may come under his or her professional care. And in case of refusal or neglect by any physician to so report, the State Board of Health Commissioners shall bring suit in any court of competent jurisdiction to recover

the penalty provided for in this act. In case of a second conviction of any physician neglecting or refusing to report as above provided, the Justice or Judge in whose court the second conviction is procured shall revoke said physician's license to practice medicine in this State for a period of not less than one year.

SEC. 36. The State Board of Health Commissioners shall quarterly certify the amount due on account of salaries to the State Health Officer, Chemist, Bacteriologist, Sanitary Engineer, and all other employes of the Board, and, on presentation of said certificate, the Auditor of State shall draw his warrant on the State Treasurer for such amount. All other expenses may be paid in like manner as above at any regular session of the Board.

SEC. 37. No county, city, town, township, public institution, private corporation or private individual shall establish or build waterworks, sewers, methods of sewage or garbage disposal except it be according to the ordinances, rules or by-laws of the State Board of Health Commissioners.

SEC. 38. No person shall, within this State, manufacture for sale, offer for sale, or sell any drug or article of food which is adulterated within the meaning of this act. The term "drug," as used in this act, shall include all medicines for internal or external use, antiseptics, disinfectants and cosmetics. The term "food," as used herein, shall include confectionery, condiments and all articles used for food or drink by man.

An article shall be deemed to be adulterated within the meaning of this act:

a. In the case of drugs, (1) if, when sold under or by a name recognized by the United States Pharmacopœia, it differs from the standard of strength, quality or purity laid down therein, unless the order calls for an article inferior to such standard, or unless such difference is made known or so appears to the purchaser at the time of such sale; (2) if, when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other pharmacopœia, or other standard work on materia medica, it differs materially from the standard of strength, quality or purity laid down in such work; (3) if its strength or purity falls below the professed standard under which it is sold.

b. In the case of food, (1) if any substance or substances have been mixed with it, so as to reduce, or lower or injuriously affect its quality or strength; (2) if any inferior or cheaper substance or substances have been substituted wholly or in part for it; (3) if any valuable constituent has been wholly or in part abstracted from it; (4) if it is an imitation of or sold under the name of another article; (5) if it consists wholly or in part of a diseased, decomposed, putrid or rotten animal or vegetable substance, whether manufactured or not, or, in the case of milk, if it is the produce of a diseased animal; (6) if it is colored, coated, polished or powdered, whereby damage is concealed, or if it is made to appear better or of greater value than it really is; (7) if it contains any added poisonous ingredient, or any ingredient which may render it injurious to the health of a person consuming it. The provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food or drinks: *Provided*, That the same are not injurious to health, and are distinctly labeled as mixtures or compounds. And no prosecutions shall at any time be maintained under said act concerning any drug the standard of strength or purity whereof has been raised since the issue of the last edition of the United States Pharmacopœia, unless and until such change of standard has been published throughout the State. The State Board of Health shall take cognizance of the interests of the public health relating to the sale of drugs and food, and the adulteration of the same, and shall make all necessary investigations and inquiries in reference thereto, and for these purposes the State, County, City, Town and State Health Officers shall be Food and Drug Inspectors, subject to the State Board of Health Commissioners. Within ninety days after the passage of this act the said Board shall adopt such measures as may be necessary to facilitate the enforcement hereof, and shall prepare rules and regulations with regard to the proper methods of collecting and examining drugs and articles of food. Every person offering or exposing for sale or delivering to a purchaser any drug or article of food included in the provisions of this act, shall furnish to any analyst or other officer or agent appointed hereunder, who shall apply to him for the purpose, and shall tender to him the value of the same, a sample sufficient for the purpose of the analysis of any such drug or article of food which is in his

possession. Whoever hinders, obstructs, or in any way interferes with any Inspector, analyst or other officer appointed hereunder in the performance of his duty, and whoever violates any of the provisions of this act, shall, upon conviction, be fined in any sum not exceeding \$100. Whoever fraudulently adulterates, for the purpose of sale, bread or any other substance intended for food with any substance injurious to health, or knowingly barter, gives away, sells, or has in his possession, with intent to sell any substance intended for food, which has been adulterated with any substance injurious to health, shall be fined in any sum not exceeding \$100, and the articles so adulterated shall be forfeited, and destroyed under the direction of the court. Whoever adulterates, for the purpose of sale, any liquor used or intended for drink with Indian cockle, vitriol, grains of paradise, opium, alum, capsicum, copperas, laurel water, log-wood, Brazil wood, cochineal, sugar of lead, or any other substance which is poisonous or injurious to health, and whoever knowingly sells any such liquor so adulterated, shall be punished by imprisonment in the State Prison not exceeding three years; and the articles so adulterated shall be forfeited.

SEC. 39. All acts and parts of acts in conflict with the provisions of this statute are hereby repealed.

SEC. 40. Any person or persons, or the officers of any corporation, who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined in any sum not exceeding two hundred dollars.

SEC. 41. Whereas an emergency exists for the immediate taking effect of this act, therefore the same shall be in force from and after its passage.

From the above bill the House Committee on Medicine and Vital Statistics constructed the following, and recommended its immediate enactment into a law:

SECTION 1. *Be it enacted by the General Assembly of the State of Indiana*, That within twenty days after the taking effect of this act the Governor shall appoint three skilled, reputable practicing physicians, graduates of a reputable medical college, one skilled engineer, who shall be competent in mechanical, civil, hydraulic and sanitary engineering, and a competent, experienced, reputable graduate in veterinary science, who shall constitute and be a Board to be denominated the State Board of Health Commissioners, who shall perform the duties and have the powers hereinafter specified, and whose jurisdiction shall be co-extensive with the State.

SEC. 2. The Governor shall commission the said Commissioners so appointed as aforesaid, and before entering upon the duties of their office they shall each take and subscribe an oath of office that they will faithfully and honestly discharge the duties of said office, which oath shall be filed in the office of the Secretary of State.

SEC. 3. The members of said Board shall hold their offices as follows: The two members first appointed shall serve and be commissioned for four years; the member next appointed shall serve and be commissioned for three years; the member next appointed shall serve and be commissioned to serve for two years, and the one last appointed shall serve and be commissioned for one year. Thereafter the Governor shall annually appoint a successor or successors to such member or members whose term or terms of office shall have expired, and such member or members so appointed shall be commissioned and serve for four years. Any vacancy in said Board shall be filled by the Governor.

SEC. 4. The State Board of Health Commissioners shall meet once in each quarter in the city of Indianapolis, and as often as they may deem necessary, and at such other times and places as they may deem expedient during epidemics. A majority shall constitute a quorum for the transaction of business. They shall choose one of their number for President, who shall serve two years, unless his term of office as a member of the Board shall sooner expire. The members of said Board shall receive their traveling and other necessary expenses while employed on the business of the Board, and no other compensation shall be given to them. Each member shall make an itemized account of expenses before the same may be paid.

The Board shall elect a State Health Officer, who shall be Secretary. The said Board shall collect and publish vital statistics, make sanitary investigations and inquiries respecting the cause of disease, the cause of mortality and the affected localities, employments, conditions, ingests, habits and circumstances on the health of the people.

POWERS.

SEC. 5. The State Board of Health Commissioners shall be a body politic, and by said name may sue and be sued in the courts of the State, and shall be invested with the police power of the State for the ordaining and enforcement of by-laws, rules and regulations for the preservation of the health of the inhabitants and domestic animals of the State of Indiana; for the prevention of contagious and infectious disease; for the prevention and correction of the pollution of rivers, water-courses, lakes and springs; for the prevention and abatement of nuisances; for the declaration of quarantine against infection and contagion; for the condemnation and destruction of animals infected with glanders, rinderpest, charbon, Texas fever, or other malignant contagious diseases; of personal property, likewise infected and likely to spread contagious and fatal diseases, and for the condemnation and destruction of any buildings or lands, in case the same are so infected with the germs of the disease of consumption (tuberculosis), diphtheria, leprosy, cancer, small-pox or any other similar infectious, contagious, malignant disease, that they can not be disinfected; and for the inspection and regulation of dairies, and the condemnation of diseased milch cows. The State Board of Health Commissioners shall have power to regulate cemeteries, burial grounds and interments, may prohibit undertakers, for the purposes of speculation, from using tombs as places of deposit for bodies committed to them for burial; may, if in their opinion the public health requires, close any tomb, burial ground, cemetery, or other place of burial within any city or incorporated town in this State, for such lengths of time as they may deem necessary for the preservation of the public health. and for this purpose may adopt by-laws, ordinances and rules, and may establish penalties for any breach of such by-laws, ordinances or rules, not exceeding one hundred dollars. The

State Board of Health Commissioners shall have power to adopt health ordinances, by-laws, rule and regulations for the purposes aforesaid, and to provide in such ordinances and by-laws that any person or corporation violating the provisions thereof, or any of them, shall forfeit any sum not less than \$1 nor more than \$100 for each violation thereof. And such State Board of Health Commissioners shall have power to recover such penalties for the violation of any such ordinances in an action brought in a corporate name of such State Board of Health Commissioners in any court of competent jurisdiction in the State of Indiana. And the practice and pleadings in such action shall be the same as in suits by municipal corporations for the violation of city ordinances, so far as such rules and pleading and practice may be applicable. Such ordinances shall be recorded in a substantial record book, similar in size and quality to a Circuit Court order book, and shall be published three times in each of two daily newspapers in the city of Indianapolis, and shall be in force after their due publication and recording as aforesaid. A majority vote of the said Board shall be necessary for the adoption of such ordinances and by-laws, which vote shall be entered upon said record book along with the record of said ordinances.

SEC. 6. In addition to the powers conferred upon said State Board of Health Commissioners by this act, the said Board of Health Commissioners shall have power to commence and prosecute in any court having equity jurisdiction in the State of Indiana any suit or suits to abate or restrain any pollution of any river, water-course, lake or spring from which the inhabitants of any city, town or district of country may derive their drinking water, or considerable portion of the same, against any person, persons, corporation or corporations causing or maintaining any such nuisance or pollution aforesaid, and such courts shall have power in any suit or suits to restrain and abate, or abate such nuisances or pollutions by mandatory injunction. And, whenever, it shall be the opinion of such State Board of Health Commissioners that the circumstances attending such act or acts of pollution of such river, water-course, lake or spring are such as to make the cause of general concern to a considerable portion of the people of the State, or to cause epidemic disease, then it shall have power to call upon the Attorney-General of

the State of Indiana to prosecute such action in his official capacity, and it shall be his duty to begin and prosecute such suit or suits to final judgment and enforce the same. And such suit or suits shall have precedence over any other civil action on the docket of any court in which the same may be brought. It shall be the duty of the Prosecuting Attorneys of the several Circuit and Criminal Courts of the State to begin and prosecute all other actions or suits brought by the State Board of Health Commissioners of this State under the provisions of this act, or for the enforcement of any ordinance or by laws, rule or regulation adopted by said Board of Commissioners, or for the recovery of any penalty for the violation of the same.

SEC. 7. All by-laws and ordinances for the condemnation of malignantly infected real or personal property, shall authorize the State Health Officer, or his deputy, in meritorious cases, in his discretion, to serve a notice upon the owner or owners thereof to appear at a time and place to be named by him therein, and show cause why the condemnation and destruction shall not be enforced. If, upon such hearing, the order of the Board to condemn and destroy be confirmed by the Board, then, in case such owner or owners and such Board shall deem it proper to award compensation, and the Board of Commissioners and the owner of such property can not agree upon the amount thereof, then said State Board of Health Commissioners may apply to the Auditor of the county in which such property is situated, to appoint three competent and disinterested resident freeholders to appraise such property. It shall be the duty of such appraisers forthwith to qualify by subscribing an oath, to be attached to their appraisal, that they will honestly and fairly appraise the property submitted to their valuation, at its fair cash value, and soon as practicable after so qualifying, such appraisers shall proceed to appraise said property and return their appraisal, with their oaths appended, to the State Health officer or his deputy, in that behalf, who shall certify the sum to the County Board of Health in the county where the transaction occurs, for record. Whereupon the County Board of Health shall order full value to be paid to such property owner or owners of such condemned property: *Provided, however,* That no damages shall be paid to the owner or owners of condemned property

who shall have contributed to cause the diseased or infected condition of the property ordered to be destroyed, by his or their willful disregard or violation of the by-laws, ordinances, rules or regulations prescribed by the State Board of Health Commissioners. Such damages so awarded shall be paid out of the public fund of the county or city in which such property is situated, as hereinafter prescribed: *And, provided further*, That such proceedings for the appraisement of such damages and payments therefor shall not delay the destruction of such condemned property. In all cases where damages are awarded to be paid out of the public fund of any county or city by the State Board of Health Commissioners, the local county or city Board shall cause a warrant to be issued to the claimant upon the filing with the local county or city Board of a certified copy of the order of the County Board of Health for such payment.

SEC. 8. The State Health Officer and Secretary of the Board of Health Commissioners shall be a graduate of a reputable medical college. He shall have made a specialty of the branch of medicine known as hygiene and sanitary science, and shall have experience and skill in sanitary chemistry and bacteriology. His term of office shall be four years, with a salary of \$2,500 a year; and he may be removed from office by the Board for intemperance, inefficiency or insubordination. He shall not practice medicine, nor recommend any person for appointment by the State Board.

SEC. 9. The State Health Officer shall give his entire time to the duties of his office; he shall be the executive officer of the Board, shall keep its records and perform all the duties of the Secretary of the Board and in accordance with the by-laws adopted by the Board. He shall make report to the State Board of Health Commissioners in accordance with the rules, regulations and by-laws of the Board, and shall also make a report to the Governor annually for the preceding year, which shall end on the 31st day of October in each year. He shall keep his office in the capitol at Indianapolis, or elsewhere, as may be provided by law.

SEC. 10. The State Health Officer shall have police powers in all matters pertaining to health of man and domestic animals throughout the State. He may, pursuant to the by-laws adopted by the State Board of Health Commissioners, declare

and maintain domiciliary, municipal, district or local quarantine, whenever the public health may demand the prevention of the spread of epidemic, malignant, infectious or contagious diseases.

COUNTY BOARDS OF HEALTH.

SEC. 11. The Board of Commissioners of each county shall constitute a County Board of Health, and shall give one session of each quarterly meeting to a consideration of the health affairs of their county. It shall be the duty of the County Board of Health to protect the public health by the removal of the causes of disease, when known, and in all cases to take prompt action to arrest the spread of contagious diseases, to abate and remove nuisances dangerous to the public health, and perform such other duties as may from time to time be required of them by the State Board of Health Commissioners pertaining to the Public Health.

SEC. 12. The present Secretaries of the County Boards of Health, appointed according to the law establishing the State Board of Health, passed February 10, 1891, shall serve until January 1, 1899, and thereafter the County Boards of Health shall appoint at their regular December meeting a Secretary, who shall serve two years from the first of January next ensuing his election.

SEC. 13. The Secretary of the County Board of Health shall be a reputable physician, and if not already informed in hygiene and sanitary science shall immediately proceed to acquire information therein according to the requirements of the State Board of Health Commissioners. He shall have police powers in his county in all matters appertaining to the public health, shall be the executive officer of the County Board of Health, shall keep its records and shall make a full written report of each quarter's work to the County Board of Health at its regular quarterly meeting. He shall receive for his services a salary of not less than ten dollars a year for each 1,000 inhabitants of the county, up to and including one hundred and twenty-five thousand (125,000) inhabitants the county contains. The number of such inhabitants to be determined by the annual enumeration of the inhabitants of such county, as determined by the common school enumeration.

SEC. 14. Such County Health Officer shall be the deputy of the State Health Officer in his county, and shall obey and enforce the by-laws, rules and regulations of the State Board of Health Commissioners; and for neglect of such duty or for intemperance or inefficiency, he may be removed by the Board of Commissioners of his county upon charges preferred by the State Board of Health Commissioners. In case of such removal, the Board of Commissioners of such county shall at once appoint a successor to such member of the County Board of Health for his unexpired term.

SEC. 15. The County Boards of Health shall be subordinate to the State Board of Health Commissioners. They shall be bound by, and enforce in their respective jurisdictions, the ordinances, by laws, rules and regulations adopted by the State Board of Health Commissioners. They shall, through the Secretary, on or before the tenth day of each month, make a report to the State Board of Health Commissioners for the preceding month, of births, deaths, marriages, and of all contagious or communicable diseases, and such other matters pertaining to the health of the inhabitants and domestic animals of their respective counties, as the State Board of Health Commissioners may by by-laws require, and upon such forms as they may adopt, and annually shall make a summary of such reports in a report to the Board of County Commissioners. The County Board of Health may be compelled to perform the duties imposed upon it by this act and by such by-laws as the State Board of Health Commissioners may adopt, by a proceeding for a writ of mandamus by the said State Board of Health Commissioners, in any court of competent jurisdiction in the county of such delinquent Board.

SEC. 16. The County Board of Health shall have power to enforce in their respective counties all the by-laws, rules and regulations of the State Board of Health Commissioners; to abate nuisances, condemn polluted wells, and other local unsanitary conditions. They shall have power to declare and maintain quarantine of diseases dangerous to the public health in accordance with the by-laws of the State Board of Health Commissioners. They may, in times of epidemics of cholera, small-pox, or other malignant contagious diseases appoint and fix the pay of special health officers by and under the directions

of the State Board of Health Commissioners; and shall control such officers and prescribe duties not in conflict with the by-laws, rules and regulations prescribed by the State Board of Health Commissioners.

CITY BOARD OF HEALTH.

SEC. 17. Within sixty days after this act shall have taken effect the Mayor of each incorporated city in this State shall appoint three reputable practicing physicians, who shall constitute a Board of Health for such city. The one first named shall serve three years; the second, two years, and the third, one year; and thereafter he shall appoint one member each year, who shall serve three years.

SEC. 18. Such City Board of Health shall elect one of their number President, who shall serve three years, unless his term expires sooner. They shall also elect one of their number Secretary, who shall serve three years, unless his term expires sooner: *Provided*, Nothing herein shall interfere with any city having a special charter appointing a City Sanitarian. The members of said City Board of Health shall receive no salary, but shall be entitled to receive the sum of two dollars per day for each day necessarily employed in attending meetings of the Board, to be paid out of the city treasury. Such City Board of Health shall meet once a month, and oftener when the public health may demand it or when called together by the Mayor of the city.

SEC. 19. The City Board of Health shall have charge of all matters pertaining to the health of the inhabitants and domestic animals within said city, shall be subordinate to the State Board of Health Commissioners, and may adopt and enforce by-laws, rules and regulations relating to the public health of the city not in conflict with the by-laws, rules and regulations adopted by the State Board of Health Commissioners. The City Board of Health shall have power to condemn polluted wells, springs, cisterns or other polluted water supplies within said city, and for the inspection, regulation and licensing of dairies within said city, and dairies selling milk within or shipping milk to such city for sale and consumption therein, and the condemnation of diseased animals; may cause nuisances to be abated; may establish and maintain quarantine; regulate the posting

and maintaining of notices of contagious and infectious diseases ; may prescribe the manner of disinfecting buildings in which contagious diseases have existed ; may destroy infected bedding, clothing, carpets and furniture ; may provide steam sterilizing machines, approved by the State Board of Health Commissioners, in sufficient numbers to disinfect, when necessary, clothing, bedding and other personal property in said city with superheated steam, or by other scientific methods approved by the State Board of Health Commissioners ; may prescribe rules and regulations governing physicians, nurses and attendants waiting upon persons who may be afflicted with small-pox, diphtheria, measles, scarlatina, cancer, puerperal fever, and other like contagious and infectious diseases, to prevent the spread of such diseases by such physicians, nurses and attendants.

SEC. 20. Any persons violating any by-laws, rules or regulations prescribed by such City Board of Health shall forfeit and pay to the city for which said City Board of Health may have been organized, a sum not less than one dollar nor more than fifty dollars for each violation of such by-laws, rules or regulations, to be recovered by a prosecution in the name of such City Board of Health before the Mayor or Police Judge of such city similar to a prosecution for the violation of city ordinances. And it is hereby made the duty of the City Attorney to prosecute all such actions for the recovery of such penalties ; and the pleading and practice in such cases shall be the same as in prosecution for the violation of city ordinances. And such penalties, when collected, shall be paid into the city treasury to the credit of the general fund.

SEC. 21. The Secretary of the City Board of Health shall be the health officer of such city and command the sanitary police. He shall, if not already well informed in sanitary and hygiene science, immediately proceed to gain information therein according to the requirements of the State Board of Health. He shall have power, at reasonable times, as may be prescribed by the by-laws of the State Board of Health Commissioners, or the City Board of Health, to make sanitary inspection of public or private premises. He shall be the deputy of the State health officer in said city, and shall perform such other duties as may be prescribed by the by-laws of the State Board of Health Commissioners, and the City Board of Health not in conflict therewith. He shall keep the city health records and collect and report all vital statistics to the county health officers.

SEC. 22. The Secretary of the City Board of Health shall be paid from the city treasury a salary not less than ten dollars per annum, for each one thousand inhabitants of such city in all cities having not to exceed twenty-five thousand inhabitants. Such salary may be increased in any city of this State by an ordinance duly adopted by the Common Council and Aldermen of such city, or by the Common Council of cities not having Aldermen.

TOWN HEALTH OFFICERS.

SEC. 23. Within sixty days after this act shall have taken effect the Trustees of each town shall appoint a reputable physician as Town Health Officer for a term of two years. If not already informed in hygiene and sanitary science he shall immediately so inform himself according to the requirements of the State Board of Health. He shall receive not less than fifty dollars per annum, and may be removed for intemperance, inefficiency or insubordination. The Town Health Officer shall be paid monthly or quarterly from the town funds by the Town Trustees. He shall have police powers in all matters pertaining to the public health, and shall be a deputy of the County Health Officer. He shall collect and accurately keep a record of the births, deaths and contagious diseases which may occur within the town in such manner and in such form as may be provided by the State Board of Health, and he shall enforce all ordinances, by-laws or rules of the State Board. He shall make monthly reports to the County Health Officer in the manner prescribed by the State Board, and shall make an annual report to the Town Council.

SEC. 24. No undertaker, sexton or other person shall bury any human body until he has received a permit to do so from the local Health Officer or his deputy. No such permit shall be issued until there has been delivered to such officer or deputy a certificate of death according to the forms prescribed by the State Board, signed by the attending physician, if any, or by the householder, or by the Coroner, or his deputies, of the county wherein the death occurred. In the event of any burial without a permit as herein provided, the Coroner of the county wherein the burial is made shall, upon complaint, exhume the body and hold an inquest, and furnish a copy of the findings to the Health Officer of the county, city or town.

STATE LABORATORY OF HYGIENE.

SEC. 25. The State Board of Health Commissioners shall establish a State Laboratory of Hygiene and appoint a competent person who shall be superintendent of the same. Said laboratory shall be under the management of the State Board of Health Commissioners, and shall be open to all citizens of the State for such analyses and bacteriological investigations as may be of public use and benefit in the preservation of the public health.

SEC. 26. The Custodian of the Capitol shall provide suitable rooms in the State House for said State Laboratory of Hygiene.

SEC. 27. The sum of three thousand dollars is hereby appropriated for the equipment of the said Laboratory of Hygiene, subject to the order of the State Board of Health Commissioners, and the sum of ten thousand dollars per annum for salaries and the expense of the State Board of Health Commissioners.

SEC. 28. Every licensed, practicing physician in the State shall report in the form and manner ordered by the State Board of Health Commissioners to the City, Town or County Health Officer in whose district it may occur, all births, deaths and also all cases of contagious or infectious diseases, classified as such by the State Board, which may come under his or her professional care. And in case of refusal or neglect by any physician to so report, the State Board of Health Commissioners shall bring suit in any court of competent jurisdiction to recover the penalty provided for in this act.

SEC. 29. The State Board of Health Commissioners shall, quarterly, certify the amount due on account of salaries to the State Health Officer, and all other employes of the Board, and, on presentation of said certificate, the Auditor of State shall draw his warrant on the State Treasurer for such amount. All other expense may be paid in like manner, as above, at any regular session of the Board.

SEC. 30. No county, city, town, township, public institution, private corporation or private individual shall establish or build waterworks, sewers, methods of sewage or garbage disposal, except it be according to the ordinances, rules or by-laws of the State Board of Health Commissioners.

SEC. 31. No person shall, within this State, manufacture for sale, offer for sale, or sell any drug or article of food which is adulterated within the meaning of this act. The term

"drug," as used in this act, shall include all medicines for internal or external use, antiseptics, disinfectants and cosmetics. The term "food," as used herein, shall include confectionery, condiments and all articles used for food or drink by man. An article shall be deemed to be adulterated within the meaning of this act: *a.* In the case of drugs, (1) if when sold under or by a name recognized by the United States Pharmacopœia it differs from the standard of strength, quality or purity laid down therein, unless the order calls for an article inferior to such standard, or unless such difference is made known or so appears to the purchaser at the time of such sale; (2) if when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other pharmacopœia, or other standard work on materia medica, it differs materially from the standard of strength, quality or purity laid down in such work; (3) if its strength or purity falls below the professed standard under which it is sold. *b.* In the case of food, (1) if any substance or substances have been mixed with it, so as to reduce, or lower, or injuriously affect its quality or strength; (2) if any inferior or cheaper substance or substances have been substituted wholly or in part for it; (3) if any valuable constituent has been wholly or in part abstracted from it; (4) if it is an imitation of or sold under the name of another article; (5) if it consists wholly or in part of a diseased, decomposed, putrid or rotten animal or vegetable substance, whether manufactured or not, or in the case of milk, if it is the produce of a deceased animal; (6) if it is colored, coated, polished or powdered, whereby damage is concealed, or if it is made to appear better or of greater value than it really is; (7) if it contains any added poisonous ingredient, or any ingredient which may render it injurious to the health of the person consuming it. The provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food or drinks: *Provided*, That the same are not injurious to health, and are distinctly labeled as mixtures or compounds. And no prosecutions shall at any time be maintained under said act concerning any drug, the standard of strength of purity whereof has been raised since the issue of the last edition of the United States Pharmacopœia, unless and until such change of standard has been published throughout the State.

SEC. 32. It shall be unlawful in this State for any packer or dealer in preserved or canned fruits or vegetables or other

articles of food, to offer such canned articles for sale after July 1, 1897, unless such articles bear a mark indicating their grade and quality, together with the name of the firm, person or company who packed the same, and the date when packed: *Provided*, This shall not interfere with canned goods shipped from a foreign country, or those packed prior to the passage of this act. The State Board of Health shall take cognizance of the interests of the public health relating to the sale of drugs and food, and the adulteration of the same, and shall make all necessary investigations and inquiries in reference thereto, and for these purposes the State, county, city and town health officers shall be food and drug inspectors, subject to the State Board of Health Commissioners. Within ninety days after the passage of this act the said Board shall adopt such measures as may be necessary to facilitate the enforcement hereof, and shall prepare rules and regulations with regard to the proper methods of collecting and examining drugs and articles of food. Every person offering or exposing for sale or delivering to a purchaser any drug or article of food included in the provisions of this act, shall furnish to any analyst or other officer or agent appointed hereunder, who shall apply to him for the purpose and shall tender to him the value of the same, a sample sufficient for the purpose of the analysis of any such drug or article of food which is in his possession. Whoever hinders, obstructs or in any way interferes with any inspector, analyst or other officer appointed hereunder in the performance of his duty, and whoever violates any of the provisions of this act, shall, upon conviction, be fined in any sum not exceeding \$100. Whoever fraudulently adulterates, for the purpose of sale, bread or any other substance intended for food with any substance injurious to health, or knowingly barter, gives away, sells or has in his possession with intent to sell any substance intended for food, which has been adulterated with any substance injurious to health, shall be fined in any sum not exceeding \$100, and the article so adulterated shall be forfeited and destroyed under the direction of the court. Whoever adulterates, for the purpose of sale, any liquor used or intended for drink with Indian cockle, vitrol, grains of paradise, opium, alum, capsicum, copperas, laurel water, logwood, Brazil wood, cochineal, sugar of lead, or any other substance which is poisonous or injurious to health, and whoever knowingly sells any such liquor so

adulterated, shall be punished by imprisonment in the State Prison not exceeding three years, and the article so adulterated shall be forfeited.

SEC. 33. All acts and parts of acts in conflict with the provisions of this statute are hereby repealed.

SEC. 34. Any person or persons, or the officers of any corporation, who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not exceeding two hundred dollars.

SEC. 35. Whereas an emergency exists for the immediate taking effect of this act, therefore the same shall be in force from and after its passage.

And that, being so amended, the bill do pass.

NEWTON,
Chairman.

The Library has not been materially increased during the last year, yet there have been some valuable additions of reports of other State Boards of Health, and of City Boards of Health.

The list of the physicians of the State, given by counties, with the names of the county health officers printed in italics, is complete and will be found very valuable in certain instances.

The list of the medical colleges of the United States which this Board considers reputable will be of aid to County Clerks in the issuing of medical licenses under the statute.

Waterworks statistics are presented for the first time in Indiana Health Reports. The data given will certainly be useful. Great sums of money are frequently wasted in supplying cities and towns with unwholesome water. The provisions should be made by law to compel cities and towns to consult the State Board of Health concerning the source and quality of their public water supply. "Projectors" have again and again mulcted the people by working up a locality to the point of putting in waterworks, and subsequently it has been found that sanitary features have not been regarded, that the engineering was bad and the mechanism faulty. If communities were compelled to submit plans and specifications to the experts of the State Board of Health and secure the approval of that authority before they could legally proceed with the work, life and money would be saved.

In April the announcement was made to all State Health Officers that the State Board would furnish, upon application, serum tubes and complete culture outfits for the bacteriological diagnosis of diphtheria. Also, that sputum examinations would be made. The above work to be done without cost to those applying. Five samples of sputum have been examined and reported upon to date, and 200 diphtheria culture outfits have been sent out. The special report on diphtheria shows the number of actual examinations made and reported.

In May circulars were distributed to all county health officers announcing that the State Board would furnish special aid in tracing typhoid fever. The aid was to make water analyses free of charge and to make sanitary surveys with recommendations. In this work thirty-seven water analyses have been made, and the same number of sanitary surveys.

Compared to other boards of health, the diphtheria and sputum examinations, and the water work done, is very insignificant. This, however, is simply a start and makes a record of the beginning of scientific health work in Indiana.

The present personnel of the State Board of Health is as follows:

D. C. Ramsey, President. Term expires March 1, 1897.

L. L. Whitesides, M. D., Vice-President. Term expires March 1, 1897.

T. Henry Davis, M. D. Term expires May 6, 1899.

John H. Forrest, M. D. Term expires May 6, 1899.

J. N. Hurty, M. D., Secretary. Term expires May 6, 1899.

FINANCIAL STATEMENT.

By appropriation..... \$4,000 00

DISBURSEMENTS.

1895.

Nov. 18.	Albert Sahm, P. M., postage	\$30 00
" 30.	Mallie Metcalf, salary	50 00
" 30.	S. W. Burns, services as janitor.....	8 00
" 30.	Grace S. Carter, salary as Clerk.....	50 00
Dec. 12.	Indianapolis Journal, subscription.....	36 25
" 12.	J. N. Hurty, water reagents, diphtheria cultures..	5 00
" 12.	H. T. Conde Implement Co., typewriter supplies..	50
" 12.	J. A. Downey, postal guide.....	2 50
" 12.	Wyckoff, Seamans & Benedict, T. W. supplies.....	5 10
" 12.	W. H. Morrison, Reg. Ind. officers	2 50
" 12.	Journal American Med. Association	5 00
" 12.	George W. Sloan, merchandise	10 30
" 12.	Lee Holtzman, livery	2 00
" 12.	L. L. Whitesides, traveling and hotel expenses to the American Public Health Association.....	162 00
" 12.	C. N. Metcalf, antitoxin, telegrams, office supplies	8 70
" 12.	C. N. Metcalf, traveling expenses..	76 24
" 12.	Albert Sahm, postage.....	25 00
" 12.	D. C. Ramsey, traveling and hotel expenses to the American Public Health Association	152 02
" 12.	D. C. Ramsey, expenses attending Board meeting..	25 00
" 12.	T. Henry Davis, exp's attending Board meeting...	10 00
" 12.	L. L. Whitesides, exp's attending Board meeting..	11 40
" 12.	J. H. Forrest, expenses attending Board meeting..	28 50
" 12.	B. H. Hermans, framing picture.....	1 50
" 31.	G. S. Carter, salary as Clerk	50 00
" 31.	Mallie Metcalf, salary.....	50 00
" 31.	S. W. Burns, services as janitor.....	8 00

1896.

Jan. 6.	C. N. Metcalf, salary as Secretary.....	200 00
Feb. 1.	Mallie Metcalf, salary	25 00
" 1.	S. W. Burns, services as janitor.....	8 00
" 29.	Mallie Metcalf, services.....	50 00
" 29.	Mrs. S. W. Burns, services as janitor	8 00
Mar. 5.	D. C. Ramsey, expenses attending Board meeting..	25 00
" 5.	L. L. Whitesides, exp's attending Board meeting..	16 75
" 5.	T. Henry Davis, exp's attending Board meeting...	10 00
" 5.	J. H. Forrest, expenses attending Board meeting ..	18 00
" 5.	Indianapolis Sentinel Co., subscriptions.....	24 00
" 5.	H. T. Conde Implement Co., typewriter supplies...	3 40
" 5.	Cathcart, Cleland & Co., "Browne on Diphtheria"..	5 00
" 5.	C. N. Metcalf, traveling and office expenses.....	11 95

Mar.	12.	D. C. Ramsey, expenses attending Board meeting..	\$28 75
"	12.	T. Henry Davis, exp's attending Board meeting...	10 00
"	12.	L. L. Whitesides, exp's attending Board meeting..	22 75
"	12.	A. Sahm, P. M., postage ..	30 00
Apr.	1.	Grace S. Carter, salary as Clerk.....	150 00
"	1.	J. N. Hurty, salary as Secretary.....	66 66
"	1.	C. N. Metcalf, salary as Secretary.....	233 34
"	1.	Mrs. S. W. Burns, service as janitor	8 00
"	1.	Bertermann Bros, flowers	8 00
"	1.	Horace Wood, carriage hire.....	4 00
"	1.	University Penn. Press, subscription	2 00
"	23.	Wm. B. Burford, printing and stationery.....	155 36
May	12.	Bertermann Bros., flowers	4 35
"	12.	L. L. Whitesides, exp's attending Board meeting..	25 00
"	12.	D. C. Ramsey, expenses attending Board meeting..	50 00
"	12.	T. Henry Davis, exp's attending Board meeting...	20 00
"	12.	J. H. Forrest, expenses attending Board meeting ..	28 00
"	12.	Indianapolis News, subscription	2 45
"	12.	J. N. Hurty, traveling and incidental expenses ..	20 35
"	12.	H. T. Conde Impl. Co., ink and paper for Mimeo..	2 90
"	12.	Green & Co., livery	2 00
"	21.	Albert Sahm, P. M., postage.....	30 00
June	2.	Mary J. Burke, report for annual meeting.....	15 00
"	2.	J. N. Hurty, extra office expense	6 00
July	1.	J. N. Hurty, salary as Secretary	300 00
"	1.	G. S. Carter, salary as Clerk.....	150 00
"	1.	J. N. Hurty, traveling and hotel expenses attend- ing N. Conference State Boards of Health.....	26 25
"	23.	J. N. Hurty, traveling expenses, Boston and New York, on account of diphtheria	93 60
"	23.	Parke, Davis & Co., culture tubes.....	2 60
"	23.	H. T. Conde Implement Co., typo stencil	2 00
Aug.	1.	L. L. Whitesides, expenses attending Conference State Boards of Health.....	32 00
"	7.	American Conf. State Boards of Health, dues	10 00
"	21.	Wm. B. Burford, printing and stationery.....	71 23
Sept.	23.	J. N. Hurty, traveling expenses to American Pub- lic Health Association	49 63
"	23.	J. N. Hurty, traveling expenses to Richmond and LaFayette	7 60
Oct.	1.	G. S. Carter, salary as Clerk.....	150 00
"	1.	J. N. Hurty, salary as Secretary	300 00
"	6.	Albert Sahm, P. M., postage.....	30 00
"	6.	C. P. Houser, dictionary.....	30 00
"	6.	American Toilet Supply Co	1 00
"	6.	D. C. Ramsey, expenses attending Board meeting..	25 00
"	6.	T. Henry Davis, exp's attending Board meeting ..	10 00
"	6.	J. H. Forrest, expenses attending Board meeting..	28 00
"	6.	L. L. Whitesides, expenses attending Board meet- ing and A. P. H. Association at Buffalo.....	98 70
"	12.	J. N. Hurty, office expenses	6 00

Oct. 23.	When Clothing Store.....	\$38 75
" 23.	George J. Mayer, dater	1 75
" 23.	Smith Premier Typewriter Co, desk chair and C. H.	8 50
" 23.	Wm. B. Burford, printing and stationery	100 37
" 23.	J. N. Hurty, office expenses and subscription	29 10
" 23.	J. N. Hurty, office expenses	99 65
" 31.	J. N. Hurty, salary as Secretary	100 00
" 31.	G. S. Carter, salary as Clerk.....	50 00
Total.....		<u>\$4,000 00</u>

STATEMENT.

INDIANAPOLIS, March 25, 1896.

The fiscal year of this Board begins November 1. On November 1, 1895, Dr. C. N. Metcalf was serving as Secretary. His term had expired February 28, 1895, and on account of failure of the Board to elect a successor he continued until successor was appointed.

Dr. Metcalf resigned March 5, 1896, resignation to take effect May 1, 1896, and Dr. J. N. Hurty was made Secretary. On March 10, 1896, Dr. Metcalf died. On March 12, in special session the Board directed Dr. Hurty to take immediate possession of the office as Secretary.

I, J. N. Hurty, found upon investigation that the minutes of the Board's meetings had not been written in the official record since February 16, 1896. The meetings not recorded were held as follows:

February 28, 1895. Special.

May 2, 1895. Regular.

June 6, 1895. Special.

September 5, 1895. Regular.

December 12, 1895. Regular.

March 5, 1896. Regular.

Being reluctant to write up another's notes of past meetings, I have enclosed said notes of meetings up to, and including those of September 5, 1895, in the record book and filed said book in the office of the State Board of Health. This action was approved by the Board March 12, 1896.

The notes of Dr. Metcalf of the meetings held December 12, 1895, and March 5, 1896, I have consented to engross in the new record, in order to make a clean start for the Board, from the beginning of this the fifteenth year of the Board's existence.

REGULAR MEETING OF THE INDIANA STATE BOARD OF HEALTH.

INDIANAPOLIS, December 12, 1895.

Meeting called to order at 10:50 A. M. Members present Drs. Ramsey, Whitesides, Davis, Forrest and Metcalf. On motion the regular order of business was suspended for the purpose of listening to a proposition which Professor Smart, President of Purdue University, wished to submit to the Board in the interest of public health. He said under the charter of the institution they had the right to teach Sanitary Science in its various branches, which they proposed to do as they had a large, well equipped laboratory for such work, so that young men might become sanitarians and find employment in the cities and towns of the State. He said they would engage in research work, such as making sanitary water surveys, and analyses of food which would be beneficial to the State. They also proposed to make analyses for the State Board of Health and give it the results of their work for publication in the reports of the Board providing they were given due credit for the same.

Professor Burrage, of Purdue, was introduced and made remarks similar to those of Dr. Smart, and also gave a brief outline of the investigations of water and sewage being made by the Massachusetts State Board of Health.

Dr. Hurty, of Indianapolis, proposed to the Board to furnish to any physician in the State, on application, tubes of solidified blood serum and sterile swabs, with full directions for use, the tubes to be securely enclosed in a small block of light wood suitable for any method of transportation. He said any physician in the State could make application for the tubes in person, by mail, by telegraph, by telephone, and he would promptly supply them. No charge to be made for material or service until the inoculated tube was returned to him, when \$1.00 must accompany it, which would cover all expenses. He said that within eighteen hours after receiving the inoculated

tube he would make a report to the physician furnishing it, stating what his bacteriological examination had revealed.

On motion of Dr. Davis, Dr. Hurty's resolution was accepted and the Secretary was instructed to have the same printed and forwarded to the various Boards of Health in the State.

On motion, Drs. Davis, Forrest and Metcalf were appointed to consider the proposition of Professor Smart, of Purdue University, and report their findings to the Board.

Dr. Ramsey introduced the following resolution, which was adopted, Dr. T. Henry Davis voting against the resolution :

WHEREAS, It has been fully demonstrated by physicians, both in private and hospital practice, that antitoxin is the best means for the cure and prevention of the much-dreaded disease—diphtheria ;

Resolved, That the Indiana State Board of Health, recognizing its value, does hereby endorse and advise its use by the local health officers throughout the State both for prevention, cure and control of epidemics of said disease.

The committee heretofore appointed to draft a new set of rules for the government of town, city and county boards of health, through its chairman, made its report and the following rules and regulations were adopted, and ordered the Secretary to have them printed and circulated, with instructions to the county boards of health to have them promulgated in their respective counties.

DOUGLAS C. RAMSEY, M. D.,
President, Mt. Vernon, Ind.

L. L. WHITESIDES, M. D.,
Vice-Pres., Franklin, Ind.

C. N. METCALF, M. D., Sec'y,
Indianapolis, Ind.

JOHN H. FORREST, M. D.,
Marion, Ind.

T. HENRY DAVIS, M. D.,
Richmond, Ind.

OFFICE OF
STATE BOARD OF HEALTH
OF INDIANA.

INDIANAPOLIS, IND., December 12, 1895.

Rules and Regulations for the Government of Town, City and County Boards of Health adopted by the Indiana State Board of Health, December 12, 1895.

SCHOOLS.

RULE 1. No person affected with any communicable disease dangerous to the public health shall be admitted into any public, private or parochial school.

RULE 2. No person shall be admitted into any public, private or parochial school from any house or building infected with any communicable disease dangerous to the public health, or who may recently have been affected with yellow fever, small-pox, cholera, diphtheria, membranous croup, scarlet fever, whooping cough, measles, or typhus fever until first presenting a certificate signed by a

reputable physician stating that all danger of communicating such disease is past, and said certificate is approved and endorsed by the Health Officer in whose jurisdiction the person may reside.

RULE 3. Upon proper notification, Town, City and County Boards of Health shall exercise especial supervision over the location, drainage, water supply, heating, ventilation, plumbing (and disposal of excreta) of the schools, school houses and all public buildings within their jurisdiction, and where any hygienic faults exist it shall be the duty of said Board of Health, upon notification of proper authorities, to immediately examine the same and advise such changes as will result in a correction of any existing defects.

DISEASES DANGEROUS TO PUBLIC HEALTH.

RULE 4. Whenever any parent, guardian or other person having charge of the sick in his or her family or having charge of any one residing temporarily therein, shall know or suspect that such persons or person are affected with cholera, typhus fever, yellow fever, small-pox, diphtheria, membranous croup, scarlet fever, measles or other communicable diseases dangerous to the public health, the person having supervision of the sick shall immediately give notice to the Health Officer within whose jurisdiction he or she may reside.

RULE 5. When any physician shall know or suspect that any person whom he is called upon to visit has cholera, typhus fever, yellow fever, diphtheria, membranous croup, scarlet fever, measles, or any other communicable diseases dangerous to the public health, such physician shall immediately give notice (together with the locality and description of the case) to the Board of Health within whose jurisdiction he may reside.

RULE 6. No parent, guardian or other person having control of any child or children shall allow or permit any such child or children to go from any house or building infected with cholera, typhus fever, yellow fever, diphtheria, membranous croup, scarlet fever, measles, or other communicable disease dangerous to the public health, to attend any church, Sunday-school, or public gathering, or to travel in any street car or public vehicle, vessel or steamer, or to travel or to appear on any highway or street without first procuring a permit from the Board of Health or its proper officer.

RULE 7. It shall be unlawful for any person to enter or leave any house or building infected with cholera, typhus fever, yellow fever, small-pox, diphtheria, membranous croup, scarlet fever, or any communicable disease dangerous to the public health, to attend any church, public meeting or place of amusement, or to travel on any street car or public vehicle, vessel or steamer, or travel or appear on any public street or highway, without first making a complete change of clothing and procuring a permit from the Board of Health exercising jurisdiction.

RULE 8. No person who is, or has been recently, affected with cholera, typhus fever, yellow fever, diphtheria, membranous croup, small-pox, scarlet fever, or any communicable disease dangerous to the public health, shall be permitted to travel or appear upon the public streets or highway, or to appear in any public place or gathering, or to travel in any public vehicle or vessel, until a certificate is made by the attending physician to the Board of Health within whose jurisdiction the case occurs, stating that all danger from contagion by reason of such disease is passed, and such certificate is approved and endorsed by said Board of Health.

RULE 9. Whenever the Board of Health or its proper officer shall know or suspect the existence of any communicable disease dangerous to the public health

and there be no physician in attendance, or should any physician, while in attendance, fail or refuse to immediately report such case to the Board of Health, it shall be the duty of said Board of Health, or its deputy, to examine such case or cases of alleged communicable disease dangerous to the public health and act as required by the rules governing said Board of Health in such cases of communicable diseases.

RULE 10. In all cases where there has been an exposure or a suspected exposure to small-pox of any person, it shall be the duty of the Board of Health under whose jurisdiction said person may be temporarily or permanently residing to quarantine for fourteen days such person as may have been exposed or suspected of having been exposed to small-pox, and to advise a vaccination or revaccination of all who may have been thus exposed. It shall be the imperative duty of the Board of Health to enforce this rule, and in case of refusal or neglect by said Board of Health to comply with the requirements of this rule, it shall be the duty of the Secretary of the State Board of Health to assume charge, and either in person or by his deputy enforce the foregoing rule. All vaccinations shall be made with non-humanized virus, the only exception being that during an epidemic of small-pox, should a sufficient quantity of bovine virus not be obtainable, humanized virus may be used when sanctioned by the Board of Health under whose jurisdiction said epidemic of small-pox may occur.

RULE 11. Whenever a physician is called upon to attend a case of cholera, typhus fever, yellow fever, small-pox, diphtheria, membranous croup or scarlet fever (if such case be outside of the corporate limits of any city or town and where there is no organized Board of Health), it shall be his duty to placard the house in which such disease prevails by placing a flag or card not less than twelve inches square in a conspicuous place on said house; the card or flag to be procured from the County Health Officer on application. When the disease has subsided and the house is disinfected, the physician in charge shall cause the flag or card to be removed. When the above-named diseases occur within the corporate limits of a city or town where there is an organized Board of Health, the Health Officer, when duly notified, shall cause said cards or flags to be properly placed and removed. The card or flag for cholera shall be black, with the name of the disease printed in white letters. The card or flag for small-pox shall be red, and have the name of the disease printed thereon. The card or flag for diphtheria, membranous croup and scarlet fever shall be yellow, with the name of the disease printed thereon. No person shall remove or cause to be removed (except as already provided) any such card or flag, until a certificate is made by the attending physician satisfactory to the Health Officer in authority, that the disease has subsided and all danger of contagion by reason of such disease is passed, and that proper disinfection satisfactory to the Health Officer has been accomplished. Any person causing the removal (except as provided) or mutilation of said card or flag before a proper certificate has been placed in the hands of the Health Officer in authority, upon conviction, shall be subject to the penalties provided in section 9 of an act passed February 19, 1891. In cities and towns flags or cards shall be provided by city or town authorities, and outside the corporate limits of cities or towns by county authorities. Every physician attending a case of small-pox, diphtheria, membranous croup, scarlet fever, or other communicable disease dangerous to the public health, shall use every reasonable precaution to prevent communicating the disease to others.

RULE 12. It is hereby made the duty of any person having charge of the remains of one who has died of small-pox, to cause the body to be interred within

twelve hours after death, and it shall be the duty of any person having charge of the remains of those who died of cholera, typhus fever, yellow fever small-pox, scarlet fever, diphtheria and membranous croup, to cause said remains to be immediately wrapped in a sheet saturated with a solution of bi-chloride of mercury in the proportion of one ounce of the bi-chloride of mercury to the gallon of water, and placed in a coffin which shall be securely closed, and the coffin not to be again opened.

RULE 13. In all cases of death from cholera, typhus fever, yellow fever, small-pox, diphtheria, membranous croup and scarlet fever, the funeral shall be strictly private. No public or church funeral shall be held, or any person permitted to enter the house containing the remains, except the undertaker and his assistants, unless by permission of the Board of Health.

RULE 14. The room in which there has been a case of contagious disease dangerous to the public health, must be immediately disinfected following the recovery of the sick or the removal of the remains, as follows, to wit:

All surfaces should be thoroughly washed with a solution of corrosive sublimate of the strength of 1 part in 1,000 parts of water. The walls and ceiling, if plastered, should be brushed over with this solution, after which they should be whitewashed with a lime wash. Especial care must be taken to wash away all dust from window ledges and other places where it may have settled, and to thoroughly cleanse crevices and out-of-the-way places. After this application of the disinfecting solution and an interval of twenty-four hours, or longer, for free ventilation, the floors and wood work should be well scrubbed with soap and hot water, and this should be followed by a second, more prolonged, exposure to fresh air, admitted through open doors and windows. School books or books from a circulating library shall not be taken into, or removed from, any house during the prevalence of any contagious disease dangerous to the public health, and if such books have been in such house during the prevalence of said diseases, they must be destroyed by the owner or library authorities, or be properly disinfected, before being returned to schools, or put in circulation.

MARRIAGE, BIRTH AND DEATH REPORTS.

RULE 15. City and Town Health Officers shall record in a record book all births, deaths and contagious or infectious diseases, and they shall monthly turn over to the County Health Officer the original returns. It shall be the duty of the County Health Officer to make a like record of said returns in a record book, and as soon as practicable return the original reports to the Health Officer from whom received.

RULE 16. All physicians, accoucheurs and midwives in this State are hereby required to report to the Secretary of the Board of Health of the town, city or county in which they may occur (within five days thereafter) all births and deaths which may occur in their practice. Whenever a physician's supply of the necessary blanks on which to make a return is exhausted, he shall at once make a requisition for the same on a Health Officer within whose jurisdiction he may reside, and said Health Officer is hereby required to immediately supply the demand.

RULE 17. It is hereby ordered that each County Health Officer in this State shall, on or before the 30th day of the month following the close of each quarter, make his quarterly returns of all marriages, births, deaths and diseases dangerous to the public health to the Secretary of the State Board of Health on blanks prescribed and furnished by the State Board of Health.

RULE 18. Whenever any birth or death occurs with no physician, accoucheur or midwife in attendance, then such birth or death shall be reported to the Town, City, or County Health Officer by the householder or other person under whose observation such death or birth may occur. All such reports to be made within five days. In all cases of death where a Coroner has held an inquest and the death has not been reported by a physician, the said Coroner is hereby instructed to make such report to the proper Health Officer as soon as practicable after holding such inquest.

RULE 19. All persons authorized in this State to solemnize marriages, are hereby required to make a report of all marriages solemnized by them to the Clerk of the Circuit Court by whom the marriage license was issued, in blanks furnished by such Clerk, within five days after the marriage is solemnized.

RULE 20. Secretaries of County Boards of Health are hereby directed to cause all physicians in their respective counties to report to them all deaths, births and diseases dangerous to the public health, on such blanks as are furnished by the State Board of Health and distributed on application by said County Health Officer.

RULE 21. In case any person feels aggrieved at any act of a Health Officer, appeal may be made to the State Board in session or its executive officer, but pending such appeal the act of such Health Officer shall remain in force.

RULE 22. All Town, City and County Boards of Health shall cause to be made at least once in each year a sanitary survey of their respective jurisdictions, for the purpose of ascertaining the existence of conditions detrimental to the public health, including in such survey stagnant ponds, imperfect drainage, sewerage, cesspools and water-closets. The construction, heating, ventilation, plumbing and disposal of excreta of all public buildings, prisons, hospitals, eleemosynary institutions and such nuisances as might prove dangerous to the public health.

RULE 23. It shall be the duty of all health authorities, officers of State institutions, police officers, sheriffs, constables and all officers and employes of the State, or any county, city, or town thereof, to assist in enforcing the foregoing orders, rules and regulations.

QUARANTINE.

RULE 24. No common carrier or other person shall bring into the State of Indiana any person sick or suspected of being sick with Asiatic cholera, small-pox, yellow fever, typhus fever, diphtheria, membranous croup and scarlet fever, or any other communicable disease dangerous to the public health.

RULE 25. When any *railway car, steamboat, vessel, or other conveyance* coming from a place or locality declared by the State Board of Health having jurisdiction as being infected with cholera, small-pox, typhus fever or yellow fever, or having on board any person or persons affected with any of the above mentioned diseases, enters any part or place in the State of Indiana, such railway car, steamboat, vessel, or other conveyance, and the crew, officers, passengers, baggage, merchandise and freight shall be subject to such inspection and disinfection as may be ordered by the State Board of Health.

RULE 26. If any person is found on any railway car, steamboat, vessel, or other conveyance, who is sick with cholera, small-pox, typhus fever or yellow fever, he or she shall be immediately removed by the health authorities within whose jurisdiction such person is found, and isolated and properly cared for until the termination of the disease, and the necessary expense of such isolation and

care (if the person so removed is unable to pay the same) shall be a valid claim against and be refunded by the owners, agents, or assigns of the railway car, steamboat, vessel, or other conveyance from which such person or persons were removed.

RULE 27. In case of small-pox, or persons reasonably suspected of having been exposed thereto, shall be removed from such railway car, steamboat, vessel, or other conveyance and be isolated for fourteen (14) days from the last exposure. In case of typhus fever, all persons reasonably suspected of having been exposed thereto shall be removed and isolated for twenty-one (21) days from the last exposure. In case of cholera or yellow fever, all persons *reasonably* suspected of having been exposed thereto, shall be removed and isolated for five (5) days from last exposure. The clothing of persons so removed, and all baggage, luggage, freight or merchandise found on any railway, steamboat, vessel or other conveyance on which there is any person sick with cholera, small-pox, typhus fever or yellow fever, and *reasonably* suspected of having been infected, shall be at once disinfected or destroyed, and such railway car, steamboat, vessel or other conveyance shall also be disinfected as required by the Board of Health having jurisdiction.

RULE 28. When deemed necessary by the State Board of Health to prevent the spread of cholera, and *after ten (10) days' notice each and every* railway car, steamboat, vessel in or coming into the State of Indiana, and used for the transportation of passengers, shall be provided with means satisfactory to said Board of Health for disinfecting the excreta of passengers and crews.

RULE 29. It shall be the duty of the conductor of any railway train, and the master of any steamboat or vessel, to immediately notify by telegram the Secretary of the State Board of Health, at Indianapolis, of any case or suspected case of cholera, small-pox, yellow fever or typhus fever occurring on board such train, boat or vessel within the limits of the State of Indiana.

RULE 30. It shall be the duty of the Board of Health or other health authority of any town, city or county, to at once furnish the State Board of Health with a true copy of any quarantine orders, or regulations adopted by said Board of Health authority, as against any foreign State or municipality or township within the State of Indiana.

PENALTIES.

RULE 31. Any person or persons failing or refusing to comply with either or any of the foregoing rules, shall be subject to the penalties provided in section 9 of an act establishing a State Board of Health, passed February 19, 1891.

ADDITIONAL RULES GOVERNING THE TRANSPORTATION OF DEAD BODIES.

RULE 9. Shipment shall not be granted in the case of any one dying of membranous croup.

RULE 10. Permit of shipment shall not be granted upon the certificate of "heart failure" alone, but in every case the cause of said "heart failure" must be stated.

All rules and parts of rules conflicting with these rules are hereby repealed.

DOUGLAS C. RAMSEY, M. D.,

President.

C. N. METCALF, M. D.,

Secretary.

Board adjourned to meet at 1:30 p. m.

Pursuant to adjournment the Board reconvened at 1:30 p. m.

The following report of Drs. Ramsey and Whitesides, delegates to the twenty-third annual meeting of the American Public Health Association, held in Denver, Col., Oct. 1, 1895, was presented, accepted and ordered printed in the forthcoming annual report of the Board.

INDIANAPOLIS, Dec. 12, 1895.

The twenty-third annual meeting of the American Public Health Association convened in the assembly room of the Brown Palace Hotel, Denver, Col., Tuesday at 10:30 o'clock, Oct. 1, 1895.

The President, Dr. William Bailey, of Louisville, Ky., called the convention to order, and after congratulating the members on their convening in the beautiful city of Denver, and asking them to excuse him from further remarks until evening, when he would deliver his annual address in Trinity Church.

The evening opening session at Trinity Church was well attended. The address of welcome to the State was made by Governor McIntire, who said that of all the conventions which this convention city had entertained none were of more importance than the one now in session. Mayor McMurray, in welcoming us to the city, said that he hoped we would have a p'asant and profitable time, and that whatever we might do here would be of value, not only here, but in every community that was represented.

Dr. Bailey then made his address, the annual address of the President of the Association. He congratulated the city of Denver in the magnificent natural conditions that prevailed and the glorious climate that will challenge the admiration of all sanitarians as well as those in the beautiful city itself.

He spoke of the advisability of celebrating the centennial anniversary of Jenner, the discoverer of vaccination, and ended with the hope that in time immunity could be had from scarlet fever, diphtheria, cholera and consumption as there now is from small-pox.

A great many papers of a high merit were read and discussed.

Among the papers read, those of Dr. Hartzell, of the Ohio State Board of Health, on the "Mississippi River as a Sewer;" of Dr. Jackson's, of Philadelphia, entitled "Suggestions as to

Ocular Hygiene in Schools;" of Dr. Dargen, President of the Massachusetts State Board of Health, on "The Daily Medical Inspection of Schools," detailing results achieved in Boston, were especially noticeable as models of clear statements of facts and enlightened opinions.

The very interesting paper of Dr. Horlbeck, of Charlestown, S. C., on "Municipal Steam Disinfection," and the following paper of Dr. Charles V. Chapin, of Providence, R. I., on "Disinfection in American Cities," were the nucleus of an interesting discussion of the subject which constitutes perhaps the chief line of effort of the Association.

Modern methods of disinfection as put in practice in progressive cities of this country were considered at some length. The statistics were gathered from fifty cities in this country and Canada. Only two out of this number disinfect after measles and all the minor contagious diseases. Those are Rochester, N. Y., and Toledo, Ohio, and their systems are very thorough. New York, Brooklyn and Philadelphia devote particular attention to the prevention of the spread of phthisis. In Detroit, Denver and Newark the favorite method of fumigation is with sulphur. St. Louis uses steam, and several other cities bichloride of mercury. In the discussion it appeared the doctors in this convention favored steam spray.

Perhaps the paper causing the most startling announcement at the convention was the one read by the great scientist of Mexico, Dr. Manual Carmona Y. Valle. It was the result of a scientific experimentation and study by Dr. Manual Carmona Y. Valle, Director of the National School of Medicine of Mexico and Europe. The discovery which the doctor has made is one which will rank with those of Koch and Pasteur. It is a sure and deadly enemy of the terrible yellow fever. By the inoculation of a yellow fever sufferer with his urine the disease is stunned and finally eradicated from the system. In 1882 the doctor began his subcutaneous injection of urine from victims of the scourge. He discovered that he could vaccinate a sound person with the fluid from a patient who was over four days diseased, and that those undergoing the operation were immuned from any further danger of contagion. The injection is made in the cellular tissues of the back of the arm, and, from 1,358 inoculations made by him, there has never followed any

other consequence than the formation of a single abscess in the place of injection.

From 1882 to 1883 while first experimenting, two hundred and eight persons were treated, and a relative of his, employed in the custom house, never went to bed although attacked.

Surgeon-General Sternberg, of the United States Army, who had been in correspondence with the discoverer, proposed that the residuum of urine be obtained by the evaporation of the liquid in a vacuum. M. Bonchard, of Paris, has been for some time investigating Carmona Y. Valle's treatment with successful results in the cases of inoculated animals. It was recommended to the physicians that they use the residuum in small flasks, which should be perfectly aseptic and hermetically sealed. Before making an inoculation Carmona Y. Valle dissolves five centigrammes of residuum in one gramme of pure water and inject with a Pravaz syringe.

Chief among the proceedings was the instructive report of the Committee on the Disposal of the Dead. Particularly that portion of the various crematories throughout the United States. The report was presented by the chairman, Dr. C. O. Probst, of Columbus, Ohio, and shows the order of the building of all crematories and the number of dead bodies consumed within each since their construction :

Washington, Pa.....	1884	Bodies.....	89
Fresh Pond, N. Y.....	1885	"	1,554
Buffalo, N. Y.....	1885	"	250
Pittsburgh, Pa.....	1886.....	"	100
Cincinnati, O.....	1887	"	314
Detroit, Mich.....	1887.....	"	183
Los Angeles, Cal.....	1887.....	"	182
St. Louis, Mo.....	1888.....	"	437
Philadelphia, Pa.....	1888.....	"	399
Baltimore, Md.....	1889	"	84
Swinbourne Is., N. Y.....	—.....	"	109
Troy, N. Y.....	1890.....	"	56
Waterville, N. Y.....	1891.....	"	5
Davenport, Iowa.....	1891.....	"	86
San Francisco, Cal.....	1893.....	"	200
Chicago, Ill.....	1893.....	"	87
Boston, Mass.....	1893.....	"	118
San Francisco	1895.....	"	28

There has been a total of 4,261 bodies consumed since the foundation of the first crematory, of which 2,783 were males, and 1,478 females.

The cost of burial is usually twenty-five dollars, though in San Francisco sixty dollars is charged. The only States in which there are laws governing cremation are Massachusetts, Michigan, Pennsylvania and Ohio. Dr. Probst said that the only objection that had been advanced against cremation was a legal one, claiming that this method destroyed the evidence of crime, while on the other hand it killed all the germs of contagion.

Many other papers of much interest were read by the Mexican delegates.

A large number of other papers were only read in title and referred to the Publishing Committee.

The papers read and discussed were, as a rule, of a high order of merit, as well as of positive value as factors in the dissemination of sanitary information.

The members of the Association were royally entertained by the hospitable people of Denver, as will be seen by the following resolutions passed by the Association just prior to adjournment:

Resolved, That the members of the American Public Health Association desire, and hereby tender, most cordial thanks to all concerned in inviting and bringing the twenty-third annual meeting of the Association to this beautiful "Queen City," even to the Committee of Arrangements, the physicians and citizens. The Chamber of Commerce, and especially to the ladies of Denver for the attractions and charming hospitality which have made the stay here a continual pleasure, to the various railroad companies for reduced rates, to the Brown Palace Hotel for the use of its Assembly Hall, and to newspapers for reports of proceedings. We also express thanks to Dr. Cantwell and other citizens of Davenport, Iowa, for courtesies extended at that place, and to the retiring President for the able, courteous and dignified manner in which he has presided over the meeting.

Appropriate resolutions were adopted upon the death of the late lamented Pasteur.

Respectfully submitted,

L. L. WHITESIDES,
DOUGLAS C. RAMSEY.

The following bills were presented and vouchers ordered drawn on the Auditor of State for their respective amounts:

T. Henry Davis, expenses attending Board meeting	\$10 00
D. C. Ramsey, expenses attending Board meeting	25 50
J. H. Forrest, expenses attending Board meeting	28 50
L. L. Whitesides, expenses attending Board meeting.	11 40
Douglas C. Ramsey, expenses attending meeting American Public Health Association, held in Denver, Col., as shown by itemized bill	152 02

L. L. Whitesides, expenses attending American Public Health Association, held in Denver, Col., as shown by itemized bill	\$162 00
Dr. C. N. Metcalf, expenses to Winamac, Shelbyville, Richmond, Greencastle, Gosport, Worthington, Sheridan, on official business	76 24
Dr. C. N. Metcalf, antitoxin treatment, instrument, telegrams and office expenses	8 70
Albert Sahn, Postmaster, postage	25 00
B. H. Herman, framing picture of the Board	1 50
Journal American Medical Association, subscription	5 00
Annals of Hygiene, subscription	2 00
J. A. Downey, 1895 postal guide	2 50
Wyckoff, Seamans & Benedict, typewriter supplies	5 10
W. H. Morrison & Co., compendium	2 50
H. T. Conde Implement Co., P. R. desk clamp	50
J. N. Hurty, set of water test reagents, diphtheria test and culture . . .	5 00
Indianapolis Journal, Daily Journal to Drs. Davis, Forrest, Whitesides, Ramsey and Metcalf	36 25
Total	<u>\$559 71</u>

Board adjourned to meet on call of the President.

SECOND QUARTER.

REGULAR QUARTERLY MEETING.

INDIANAPOLIS, March 5, 1896.

Meeting called to order at ten A. M. Members all present.

Minutes of previous meeting read and approved.

Dr. Davis reported that the Attorney-General render an opinion by request of the Secretary regarding the promulgation of the rules.

Dr. Davis was appointed a committee of one to draft a rule governing the promulgation of said rules.

Secretary submitted the Fourteenth Annual Report to be submitted to the Governor, was read and ordered transmitted to the Governor.

The following rule was adopted:

PROMULGATION.

RULE. It shall be the duty of county health officers to cause all rules and regulations of the State Board of Health to be promulgated in order that they may have the force of law.

Promulgation shall consist in the publication of said rules for three successive issues in a newspaper of general circulation in the county where said rules are to be enforced. Said publication to have attached the signature of the county health officer.

Dr. Davis, chairman of the committee, to which was referred Prof. Smart's proposition reported that the committee believed that it would be policy for this Board to accept the same, and that the Secretary be instructed to notify Prof. Smart that his proposition was accepted. The report was accepted.

The following resolution was presented and adopted:

On motion it was ordered that a copy be sent to each of the other employes who severed their connection with the Board:

INDIANAPOLIS, March 5, 1896.

WHEREAS, Miss Estella Jackson, a clerk in the office of the Indiana State Board of Health, has voluntarily severed her connection with said Board, and

WHEREAS, In view of her long, faithful and efficient service we deem it but just that some token of appreciation of those services should be given by this Board.

Resolved, That the Indiana State Board of Health, in session, tenders to Miss Estella Jackson, its sincere thanks for the earnest, diligent and efficient manner in which she discharged every duty imposed upon her during her term of service as clerk of this Board.

Be it further resolved, That a copy of these resolutions and preamble be spread upon the minutes of this Board, and that another copy with seal of this Board attached be forwarded to her by the Secretary of this Board.

D. C. RAMSEY, M. D.

On motion the Board went into the election of a member of the State Board of Dental Examiners. On motion Chas. E. Pittman, of 1st street, Evansville, Ind., was unanimously elected.

The following bills were presented and allowed :

Cathcart, Cleland & Co., "Browne on Diphtheria".....	\$5 00
John J. H. Forrest, M. D., expenses attending Board meeting.....	18 00
T. Henry Davis, M. D., expenses attending Board meeting.....	10 00
L. L. Whitesides, M. D., expenses attending Board meeting.....	16 75
Douglas C. Ramsey, M. D., expenses attending Board meeting.....	25 00
C. N. Metcalf, traveling expenses to Lafayette on official business, tele-grams, office supplies.....	11 95
H. Conde Implement Co., supplies for mimeograph.....	3 40
Indianapolis Sentinel Co., subscription.....	24 00
Total.....	<hr/> \$97 45

Adjourned to meet at 1:30 P. M., with the understanding that the first order of business be the election of a Secretary.

Pursuant to adjournment the Board met at 1:30 P. M.

Dr. Metcalf presented his resignation to take effect May 1, 1896.

INDIANAPOLIS, March 5, 1896.

To the Honorable President and Members of the Indiana State Board of Health:

GENTLEMEN—I herewith tender my resignation as Secretary of this Board, to take effect May 1, 1896.

Yours respectfully,

C. N. METCALF,
Secretary.

On motion the Board proceeded to the election of a Secretary with the following results :

Dr. Dunham	1
Dr. Wm. B. Clark.....	1
B. F. Stone.....	1
J. N. Hurty.....	2
Durham.....	1
Stone.....	1
Hurty.....	3

Dr. Hurty, having received a majority of all votes cast, was declared elected, his term of office to begin May 1, 1896.

CALLED MEETING OF THE STATE BOARD OF HEALTH.

INDIANAPOLIS, March 12, 1896.

Present, Ramsey, Whitesides and Davis.

Called to order by President.

Moved by Dr. Whitesides that Dr. Hurty be appointed to fill out unexpired term of Dr. Metcalf.

Unanimously carried.

Dr. Davis moved the Secretary have printed a sufficient number of new rules, including rule on promulgation, to supply county health officers heretofore unsupplied and distribute the same. That the Secretary also revise contagious disease circulars to correspond with the new rules and to distribute the same to county officers.

Ordered, Secretary to have printed a new supply of stationery.

Moved by Dr. Whitesides that the bill of \$8.00, of Bertermann Bros., be allowed. Carried.

Moved by Dr. Whitesides that the following rules and regulations concerning the management of dairies be adopted.

Unanimously carried.

 STATE BOARD OF HEALTH.

MEMBERS.

DOUGLAS C. RAMSEY, M. D.,
Pres., Mt. Vernon, Ind.
L. L. WHITESIDES, M. D.,
Vice-Pres., Franklin, Ind.
J. N. HURTY, M. D., Sec'y,
Indianapolis, Ind.
JOHN H. FORREST, M. D.,
Marion, Ind.
T. HENRY DAVIS, M. D.,
Richmond, Ind.

RULES AND REGULATIONS

FOR THE

CARE AND MANAGEMENT OF DAIRIES

IN THE STATE OF INDIANA.

 ADOPTED BY THE STATE BOARD OF HEALTH, MARCH 12, 1896.

1. No building shall be used for stabling cows for dairy purposes which is not well lighted, ventilated, drained and constructed.

2. No building shall be used for stabling cows for dairy purposes which is not provided with a suitable floor, laid with proper grades and channels to carry off all drainage; if a public sewer abuts the premises upon which such buildings are situated they shall be connected therewith and furnished with proper sanitary traps.

3. No building shall be used for stabling cows for dairy purposes which is not provided with good and sufficient feeding troughs or boxes, and with a covered, water-tight receptacle outside the building for the reception of dung or other refuse.

4. No water-closet, privy, cess-pool, urinal, inhabited room or workshop shall be located within any building or shed used for stabling cows for dairy purposes, or for the storage of milk or cream; nor shall any fowl, hog, horse, sheep or goat be kept in any room used for such purpose.

5. No space in buildings or sheds used for stabling cows shall be less than five hundred (500) cubic feet for each cow, and the stalls therefor shall not be less than four (4) feet in width.

6. It shall be the duty of each person using any premises for keeping cows for dairy purposes to keep such premises thoroughly clean and in good repair and well painted or whitewashed at all times.

7. It shall be the duty of each person using any premises for keeping cows for dairy purposes to cause the building in which cows are kept to be thoroughly cleaned and to remove all dung from the premises so as to prevent its accumulation in great quantities.

8. Every person keeping cows for the production of milk for sale shall cause every cow to be cleaned every day and to be properly fed and watered.

9. Every person using any premises for keeping cows shall cause the yard used in connection therewith to be provided with a proper receptacle for drinking water for such cows; none but fresh, clean water to be used in such receptacle.

10. Any enclosure in which cows are kept shall be graded and drained so as to keep the surface reasonably dry and to prevent the accumulation of water therein, except as may be permitted for the purpose of supplying drinking water; no garbage, urine, fecal matter, or similar substances shall be placed or allowed to remain in such enclosure, and no open drain shall be allowed to run through it.

11. Any person using any premises for keeping cows for dairy purposes shall provide and use a sufficient number of receptacles, made of non-absorbent materials, for the reception of storage and delivery of milk, and shall cause all milk to be removed without delay from the room in which the cows are kept.

12. No milk shall be kept in ice boxes or refrigerators which are in any way connected with sewers or cesspools, nor shall any milk be kept in the same compartment of any ice box or refrigerator in which meats or other articles of food are kept.

13. All cans, measures and other receptacles for milk shall be scalded with boiling water or live steam daily; they must not be rinsed in cold water before using, for the water may not be pure and some of it remaining in the vessels may contaminate the milk. All milk cans coming from the dairies to dealers must be properly cleaned as above before returning to producer, thoroughly aired and kept turned upside down in a cool place.

14. All milk shall be strained through wire cloth strainers and shall be cooled to 58 degrees within forty-five (45) minutes after it is drawn from the cow. In winter weather said cooler should be guarded against freezing. The milk shall not exceed 60 degrees when delivered to the consumer or dealer.

15. All milk cans delivered to creameries or dealers in the city shall be covered with air-tight lids, and when conveyed in open wagons shall be covered with canvas while being so conveyed, said canvas to be kept clean by frequent washing.

16. All stripping, as well as first part of milk, shall be delivered. The night's and morning's milk shall not be mixed. No milk shall be delivered that

is taken from a cow that has calved within twelve (12) days, or from a cow that will come in or calve inside of sixty (60) days.

17. Cows shall not be fed on feed which will impart a disagreeable flavor to milk, or upon any food which will not produce milk of a standard richness, or any sour, damaged feed or ensilage.

18. It shall be the duty of any person having charge or control of any premises upon which cows are kept to notify the Secretary of the Board of Health of the existence of any contagious or infectious disease among such cows immediately upon the discovery thereof, and to thoroughly isolate any cow or cows affected, and to exercise such other precautions as may be directed, in writing, by the said Secretary.

19. It shall be the duty of any person owning or having control of cows used for the production of milk for sale or exchange to submit said cows to the tuberculin test for tuberculosis, on the written order of the Secretary of the Board of Health.

CONTAGIOUS DISEASES.

20. It shall be the duty of any person having charge or control of any premises upon which milk or cream is produced, handled, stored or distributed, to notify the Secretary of the Board of Health immediately upon the discovery of any case of Asiatic cholera, croup, diphtheria, measles, membranous croup, scarlet fever, small-pox, typhoid fever, typhus fever, or any other contagious or infectious diseases upon such premises. No milk or cream shall be sold, exchanged, given away, or in any other manner distributed from such infectious premises until all danger of spread of disease shall be removed and the Secretary certifies to that effect. No person who attends cows or milks them, or who has the care or handling of vessels for the sale, storage or distribution of milk or cream, shall enter any place or premises wherein exists any of the diseases mentioned herein, nor shall any such have any communication, direct or indirect, with any person who resides in or is an occupant of such infected place. Strict cleanliness of the hands and person of milkers and those engaged in the handling of milk or cream, and of the bodies of cows, especially of the udders and teats, must be enforced at all times, to the end that no impurity or foreign substance may be added to the milk or cream, such addition being declared adulteration by the statute.

21. No person shall add water or any other foreign substances to milk or cream offered or intended for sale or exchange. Milk offered for sale as whole milk or sold as such, which contains more than eighty-seven (87) per cent. of watery fluid, or less than thirteen (13) per cent. of milk solids, including three and seven-tenths (3.7) per cent. of butter fat, is *prima facie* watered, and such watering is declared an adulteration by the State statutes, the punishment for which is a fine of not less than twenty-five dollars (\$25.00) for each and every offense.

D. C. RAMSEY, M. D., President.

J. N. HURTY, M. D., Secretary.

Moved by Dr. Davis that the Secretary be instructed to inform all county officers of the above resolution and furnish them with a copy of the same, and that they be ordered to promulgate the same.

Unanimously carried.

President appointed a committee of Drs. Whitesides, Davis and Hurty to prepare appropriate resolutions concerning the death of Dr. Metcalf, the same to be ready by next meeting.

Taken by consent.

Moved by Dr. Davis that the Secretary be instructed to complete the report for 1895.

President ordered that if no minute book exists the Secretary shall purchase one.

By consent.

The following bills were allowed :

Douglas C. Ramsey, M. D., attending Board meeting and telegrams	\$28 75
L. L. Whitesides, M. D., attending Board meeting and telegrams	22 75
T. Henry Davis, M. D., expense attending Board meeting.....	10 00
Total	<u>\$61 50</u>

Ordered, That all past minutes found unrecorded be collected and arranged, to be signed by the President and placed on file.

Adjourned.

D. C. RAMSEY, *President*.

J. N. HURTY, *Secretary*.

THIRD QUARTER.

INDIANAPOLIS, April 17, 1896.

HEALTH CIRCULAR, }
No 1. }

CONCERNING HOW CERTAIN FOODS SHALL BE PROTECTED FROM DUST POLLUTION.

In many cities and towns it is the custom for grocers, butchers and other venders of food, to expose their wares in front of their shops and stores. Butchers very frequently make an unusual exposure of meats to the dust and filth of the street. Grocers expose on the sidewalks in front of their stores dried fruits, smoked meats, etc.

OBJECTIONS.

The dust floats in the air contain a great deal of filth. It carries pulverized manure, dried catarrhal and consumptive sputum, and much other offensive matter, besides micro-organisms of all kinds. All this we must endure to the evident disadvantage of our health, when we walk abroad in cities where dust is not kept down. It is not well, however, that we should eat dried manure and dried spittle on our meat and groceries, even if cooked.

WHAT TO DO.

County health officers are hereby directed to issue written orders to all butchers and venders of meats not to expose outside their shops carcasses, or parts of carcasses, of any animal intended for food. Neither shall dressed meats be transported through streets without being protected from dust.

Grocers must be ordered not to expose dressed poultry, nor uncovered smoked meats, nor uncovered dried fruits, as dried apples, dried peaches, currants, etc. Nor, indeed, any foods which may become polluted and corrupted by dust from the air in the way above described.

THE LAW.

Section 2069, R. S. 1881, gives ample power to health officers in this matter.

J. N. HURTY,
State Health Officer.

SANITARY INSPECTION OF STATE PRISON SOUTH.

BY J. N. HURTY, M. D., SECRETARY.

The State Prison at Jeffersonville was visited April 10, 1896. At that time there were 850 male prisoners, two being insane. The general health may be pronounced good, yet "there had been several cases of consumption, pneumonia and typhoid fever." "Indigestion had prevailed to a considerable extent." The exact number of cases of diseases and their results can not be given because the promised report of the prison physician

has not been received. Unsanitary conditions are, of course, the cause of the zymotic diseases. The cases of consumption may have been contracted by the individuals before admission to the prison, but it was highly unlikely that the typhoid and pneumonia were contracted on the outside.

The indigestion, which was reported by the prison physician, as "quite considerable" probably proceeded in part from poorly baked bread, for inspection discovered on the day of the visit that the bread was imperfectly baked, the loaves being sour and sodden in their interior. The flour was of very good quality. The other foods were of good quality, abundant in quantity and well cooked. The Warden immediately ordered that the baking should be thoroughly done.

The water supply is obtained from a large dug well, forty or fifty feet deep, situated about the center of the walled area. The water was very clear and bright, odorless, with a flat taste. As all of the food, except bread, is thoroughly cooked, it is highly probable that typhoid fever in the prison proceeds from this well. Much of the indigestion might also be caused by the water.

There are 680 cells in the prison. They are in tiers within large buildings called cell rooms. Ventilation is from the cells through grated doors into the outer room which is ventilated simply through windows opening to the outer air. Wooden buckets without covers are used in the cells to receive the night excreta. Each prisoner carries forth his cell bucket each morning to the sink in the yard, where it is emptied and afterward rinsed and scrubbed. Each prisoner is compelled to take at least one bath each week. Cells are cleaned and beds made up by specially detailed prisoners.

The bedsteads should all be iron, but at present many wooden ones are in use. At the time of my inspection it could not be said that all of the cells and beds were sanitarily clean. The pronounced "prison odor," due mostly to poor ventilation and the sodden wooden cell buckets, could be entirely abolished if the Warden had the necessary means. The privy arrangements in the yard were very bad, but information was given that new urinals and hoppers with ample drainage and flushing facilities were to be immediately constructed. The hospital is beneath the chapel and consists of one large room without any ordinary hospital conveniences.

This is wrong indeed. To place sick men where they can not be properly cared for, and where they are disturbed by the coming and going of hundreds to religious services is most objectionable. The drainage of the prison grounds within the walls is bad and so also the outside grounds to the west. All of these objectionable conditions can only be remedied by special legislative action, for a special appropriation is required.

RECOMMENDATIONS.

It is imperative that a new building be built containing a modern hospital, with all proper hospital facilities. Cold storage for the whole institution should also be provided. The ground inside and outside the walls should be better drained. The sodden wooden cell buckets should be abolished and metal ones with covers provided. These should be cleaned with steam or hot water and disinfected with chemicals. All wooden bedsteads should be supplanted with iron ones. Greater cleanliness could then be practiced in regard to the beds. The water supply should be analyzed chemically and bacteriologically and such steps taken concerning it as the results of the analysis should indicate. It is lastly recommended the law should direct that the State and county prison physicians be chosen by examination and that said examination include an inquiry into the applicant's knowledge of sanitation.

General circular concerning the promulgation of rules governing dairies, passed March 12, 1896:

APRIL 17, 1896.

DEAR DOCTOR—We invite your very careful and close attention to the Rules of this Board. Please make yourself very familiar with them, and so soon as they are legally promulgated, according to Rule 33 (on Yellow Card), energetically enforce them. The general rules are sent in sufficient quantity to enable you to give one to each physician in your county. The Dairy Rules need not be distributed, because you or city health officers must enforce them. Their publication, in order to promulgate them, will sufficiently inform the public. In cases of dispute or uncertainty concerning the purity of water or milk, samples may be sent to this office upon application for directions, etc.

You are urged to write to the U. S. Department of Agriculture at Washington, D. C., and procure Bulletin No. 24 on hog cholera. Also Bulletin No. 25 on Dairy Bacteriology. They are very important documents, containing much valuable information, and will be sent without cost.

Three million dollars are annually lost on account of hog cholera in this State, and fully five million dollars are lost on account of unnecessary cattle diseases, deterioration of milk and other dairy products. Fifty per cent. of this loss can easily be saved if County Health Officers will give this subject their close attention.

This office will be happy to receive any criticisms of the Rules, or any suggestions that you may wish to make.

Very truly,

J. N. HURTY,
Secretary State Board of Health.

ANNOUNCEMENT.

INDIANAPOLIS, April 27, 1896.

DEAR DOCTOR—The annual meeting of the Town, City and County Boards of Health, will be held in Room 12, State House, May 12 and 13, 1896. Meeting called to order May 12, 10 A. M.

County health officers will please inform all city and town health officers in their respective counties and urge their attendance.

All who attend are requested to be prepared to give a full report of their work, of the difficulties and hindrances met, and to set forth any ideas they may have in any way appertaining to sanitation and health.

Special interest will center in proposed health legislation.

You are invited to send your suggestions for the conduct of the meeting. Health officers can not afford to be absent.

DOUGLAS C. RAMSEY, M. D.,
President.

J. N. HURTY, M. D.,
Secretary.

CIRCULAR OF INQUIRY.

INDIANAPOLIS, April 27, 1896.

To County Health Officers:

Please fill out this blank and return to this office as soon as possible:

County..... Date.....
Name of local medical society and its officers.....

Population of county.....

Name the cities and towns and their health officers in your county that have Boards of Health:

Town.....	Health officers.....
Town.....	Health officers.....
Town.....	Health officer.....
Town.....	Health officer.....

....., M. D.,
Secretary County Board of Health.

SPECIAL INSTRUCTIONS.

Circular "B."

DAIRY PRODUCTS.

INDIANAPOLIS, May 1, 1896.

How to collect samples of milk, cream, butter and cheese which are to be sent to the State Board of Health for analysis.

MILK AND CREAM.—One pint is required. Collect in a strong one pint bottle; add twenty drops of chloroform or five drops of a forty per cent. solution of formalin; cork well, pack securely, and send by express prepaid.

BUTTER.—One-half pound is required. Send sample in tin ointment box or glass fruit jar. Pack securely, and send by express prepaid.

CHEESE.—One-half pound is required. Prepay express.

There is no appropriation for this work; it is done gratuitously by the Secretary in his private laboratory, therefore some restrictions are necessary. County health officers will, by letter, please give fully the facts concerning each sample, and, while they may freely send as many samples as seem necessary, they are requested to remember that delays might occur if too many analyses come at one time.

 1896.

INDIANA STATE BOARD OF HEALTH.

(Health Circular No. 2.)

PREVENTION AND SUPPRESSION OF TYPHOID FEVER.

Official Order, in Force May 1, 1896.

To Health Authorities, Attending Physicians and Heads of Households:

The high mortality from *Typhoid Fever* in Indiana during the last year is a reproach to all health authorities and to all physicians.

Number of cases.....	8,100
Number of deaths	2,400

Each *death* is a loss to the State of not less than \$1,600. The total loss on account of death is \$2,400,000.

Each *case* is a loss to the State of not less than \$350. The total from this cause is \$2,835,000.

Grand total, \$5,235,000.

Fifty per cent. of this useless and unnecessary loss can easily be saved, and eighty per cent. can be saved by strong effort.

This great saving of money must be effected, and at the same time save the heart-aches, widowhood, orphans, etc., that accompany sickness and death.

Typhoid fever is a communicable disease, and for sanitary purposes it is contagious. The specific poison of typhoid fever is contained in the excreta of the patient. If these obtain access to a water supply or to articles of food or drink, an outbreak of typhoid will almost certainly appear.

Typhoid fever may be propagated in either of the following ways:

1. The most general way is through the water supply becoming poisoned by the direct access of typhoid discharges, or by their percolation through the soil.
2. By the dissemination through the air of the poison in dried particles.
3. By exhalations from sewers or water-closets.

THE DUTY OF PHYSICIANS.

First. Promptly report the case to the city or county health officer. This is a *moral, social and legal duty*. The county officer will report to this Board, and then analysis of water and other sanitary work can be undertaken.

Second. If possible, have the patient placed in a room apart from the rest of the family, preferably on the top floor, and nursed as far as possible by one or two persons. Sometimes nurses make bread or prepare other food with hands contaminated by caring for the patient. This leads to other cases in the family.

Third. The dishes, knives, forks, spoons, underclothing and other articles used by the patient, should not be used by any one else, and should not be removed from the room until they have been disinfected. This is done by placing them for an hour in a solution of carbolic acid (six ounces of the acid to one gallon of water) and then boiling them in water.

Fourth. The manner of disposing of the discharges from the bowels is of the *utmost importance*. In the vessel receiving the discharge there should be a quantity of chloride of lime, and after the discharge is received it should be covered by at least a pint of solution of chloride of lime in the proportion of six ounces to a gallon of water. It should be allowed to stand for an hour, and be thoroughly mixed before emptying into the closet.

Fifth. The hands of those caring for the sick, and the portions of the patient's body which have become soiled with discharges should be frequently disinfected with a carbolized solution. The carbolic solution above described can be diluted one half for the purpose.

THE DUTY OF HEALTH OFFICERS.

First. Every case of typhoid fever must be reported by the physician to the county health officer. Any physician failing in this duty to himself and humanity will be prosecuted.

Second. Upon receipt of report of a case of typhoid the health officer to whom report is made shall, without delay, in *conjunction with the attending physician*, visit the patient and make a thorough investigation. A sanitary survey shall be made of the premises according to the "Sanitary Survey Blank for Typhoid," and said blank, when filled, shall be filed to make a record. Every effort must be made to discover the source of the disease. The incubation period of typhoid may be seven days; average is twelve to fourteen days; greatest, twenty-three days.

TYPHOID AND WATER.

Ninety-five per cent. of all cases of typhoid proceed from drinking water. Therefore, a close investigation must be made of every well from which the patient may have drunk from seven to twenty days preceding the attack. If, in the judgment of the health officer, analysis is required, send a copy of the Sanitary Survey to this office and ask that *Instructions A* be returned to you. This circular gives detail instructions for the collection of samples of water for bacteriological and chemical analysis. The work will be done without cost, but will only be done when absolutely needed, and when every requirement of this office has been fulfilled. By order of the State Board of Health.

J. N. HURTY, M. D.,
Secretary.

D. C. RAMSEY, M. D.,
President.

SPECIAL INSTRUCTIONS.

"A"

COLLECTION OF SAMPLES OF WATER FOR ANALYSIS.

For Sanitary Chemical Analysis—One-half gallon is required. Collect in a perfectly clean one-half gallon glass-stoppered bottle. Rinse the bottle three or four times with the water it is to contain; wash the glass stopper in the same water and securely tie it down. Label by tying to the neck an express tag, on which write date of collection, town or city and county, name of Health Officer and name of owner of well. Pump out a good quantity of water from the well before taking sample. Prepay express.

For Bacteriological Examination—One ounce is required; more, however, may be sent. Secure a one, two, three or four-ounce bottle having a glass stopper. Clean the bottle and stopper perfectly with boiling water, and afterward sterilize both by baking for one-half hour in a hot oven. Place the stopper tightly in the bottle while both are hot, let cool, and do not open until the water to be analyzed is collected. At the well pump out a good quantity, and fill the bottle by holding it in the stream, being careful not to have the stopper out longer than is absolutely necessary. Tie the stopper down securely, pack the bottle in ice and send by express prepaid.

It is of the utmost importance that the sample to be examined for intestinal bacteria be packed in ice. A half-gallon or gallon tin bucket, with a small hole in the bottom to drain away the water from the melting ice, will be excellent in which to pack the sample. The bucket, in hot weather, might be packed in sawdust in a box of appropriate dimensions, to prevent the too rapid wasting of the ice. The small bottle might also be placed in a fruit jar and the jar filled with ice.

The Sanitary Survey must be made before the samples for analysis are taken and a copy sent to this office with the samples.

The report will be made the third day after receipt of sample.

STATE BOARD OF HEALTH,
OF INDIANA.

D. C. Ramsey, M. D., President.
L. L. Whitesides, M. D., Vice-President.
John H. Forrest, M. D.
T. Henry Davis, M. D.
J. N. Hurty, M. D., Ph. D., Secretary.

No.....

SANITARY SURVEY.

TYPHOID.

Date..... County.....

Health Officer.....

Name of patient

Age.....Sex.....White. Black.

Has the patient been at home for twenty days preceding the attack?.....

If away, where?.....

Was any typhoid there or thereabouts when visit was made?.....

(If the patient has been at home for twenty days preceding the attack, then the cause of the disease must be in the immediate vicinity. If he or she has been away, the cause must be looked for both at home and abroad.)

Is the building frame or brick?.....Old. New.

Number of rooms?..... Any cellar?.....

Extent and condition of cellar.....

Is the ground upon which the house stands natural or made?.....

Vaults, number and condition.....

Sinks, number and condition.....

Dug well? Driven well? Public supply

Distance of vault from well.....

Direction of ground trend. Toward the well?..... Away from well?.....

Sewer connection?..... Proper sewer traps?.....

Measles, scarlet fever, diphtheria or typhoid within the year?.....

Any deaths within the year?..... Cause of death.....

Source of family milk supply.....

(If from a dairy visit it and make a careful sanitary inspection and write a separate report of it.)

Remarks

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REPORT OF A CASE OF GLANDERS, JANUARY, 1896.

BRAZIL, IND., May 2, 1896.

On January 27th I was called with J. C. Tait, a veterinary surgeon, to examine a horse supposed to be afflicted with glanders, belonging to Casper Schepherman of this city.

It was decided that the animal had glanders, and it with four mules in the same stable were quarantined awaiting the arrival of the State Veterinarian, who was immediately notified.

On his arrival, a day or so later, he ordered the horse shot and the body destroyed and the four mules kept in quarantine for the period of three months, or until further orders.

A man named Goodwin was hired by the owner to take the horse outside the city and destroy him. Instead of doing so, however, he employed one Christenberry to do the work. He, Christenberry, led the horse several miles over the country endeavoring to sell or trade him. Warrants were issued for the arrest of all concerned and Christenberry was apprehended with the horse in his possession at Terre Haute, where the horse was finally killed on February 1st.

These men were tried, found guilty of misdemeanor and sentenced to jail. On March 1st the quarantine on the mules was raised, as no symptoms of disease had appeared.

Respectfully submitted,

ROBERT W. HAWKINS, M. D.

Secretary Board of Health, Clay County, Ind.

INDIANAPOLIS, IND., May 8, 1896.

Dr. J. N. Hurty, Secretary State Board of Health:

DEAR SIR—Answering your favor of the 5th I beg to say that there is no provision in the statutes of this State requiring a renewal of licenses to practice medicine, and there is no substantial difference between the act of 1885, as originally passed and as amended in 1891, and I am therefore of the opinion that any person who has been licensed before the passage of the act of 1891, in accordance with then existing laws, may still continue to practice without a renewal of license.

Yours very truly,

W. A. KETCHAM.

REGULAR BOARD MEETING, MAY 12, 1896.

INDIANAPOLIS, May 12, 1896.

Present, Drs. Ramsey, Whitesides, Davis, Forrest and Hurty.

President Ramsey called meeting to order at 10 A. M.

Minutes of last meeting read and approved. President of the Board signed said minutes.

Committee on resolutions concerning Dr. Metcalf's death continued.

Ordered, That the State Board of Health attend in a body the National Conference of State Boards of Health in Chicago, June 10, 11 and 12, 1896.

Dr. Metcalf's voucher for salary as Secretary for October, 1895, was ordered made in duplicate and forwarded to Mrs. Metcalf.

The following resolution was unanimously passed:

WHEREAS, We, the members of the State Board of Health, have, after study and experience, come to the conclusion that the present statute creating and supporting the State Board of Health is imperfect and inadequate, not up to the times, and otherwise deficient; now, therefore, be it

Resolved, That we memorialize the Assembly of 1897 to repeal the act of 1891, and to pass a new act that shall meet all current conditions; and, further, be it*Ordered*, That the Secretary of this Board is directed to carefully prepare, in writing, the points which a more perfect and up-to-date law should include, and present them to the Board for consideration.

The following bills were allowed:

Thomas A. Green, sub. News.....	\$2 45
J. N. Hurty, traveling and incidental expenses	20 35
Bertermann Bros., flowers	4 35
Douglas C. Ramsey, traveling expenses.....	50 00
L. L. Whitesides, traveling expenses.....	25 00
John H. Forrest, traveling expenses.....	28 00
T. Henry Davis, traveling expenses.....	20 00
H. T. Conde Implement Co., typewriter supplies	2 90
Green & Co., livery.....	2 00

Total.....\$155 05

Adjourned.

D. C. RAMSEY, *President*.J. N. HURTY, *Secretary*.

SIXTH ANNUAL CONFERENCE OF STATE HEALTH OFFICERS

IN ROOM 12, STATE HOUSE, INDIANAPOLIS, INDIANA, TUESDAY AND WEDNESDAY, MAY 12TH AND 13TH, 1896.

PROGRAM.

First Session, Tuesday, 10 A. M. to 12 M.

Second Session, Tuesday, 2 to 5 P. M.

Third Session, Tuesday, 8 P. M., at the Medical College of Indiana. Reception.

Fourth Session, Wednesday, 9 A. M. to 12 M.

Fifth Session, Wednesday, 2 to 5 P. M.

Called to order by Douglas C. Ramsey, M. D., President State Board of Health.

Welcome, Hon. Claude Matthews, Governor of Indiana.

Response on behalf of the Convention, W. R. Francis, M. D., Secretary Grant County Board of Health.

REPORT OF COMMITTEES.

1. To solicit a more liberal Appropriation for Health Purposes, W. R. Francis, M. D., Marion, Chairman.

2. Whose duty it shall be to Devise Plans to Meet Emergencies, T. F. Leech, M. D., Crawfordsville, Chairman.

3. Whose duty it shall be to Define the Duties and Powers of Health Officers, S. N. Hamilton, M. D., Connersville, Chairman.

4. Whose duty it shall be to consider the expediency of Districting the State for Sanitary Purposes, and such other matters as will increase the efficiency of the State Board of Health, S. H. Pearse, M. D., Mt. Vernon, Chairman.

Paper—What Indianapolis is doing in Sanitary Matters, C. E. Ferguson, M. D., Secretary Indianapolis Board of Health.

Paper—State Supervision of the Public Health, Severance Burrage, Professor of Hygiene, Purdue University.

Paper—The Filtration of Public Water Supplies, J. N. Hurty, M. D., Secretary State Board of Health.

TOPICS SUGGESTED FOR DISCUSSION.

Should Quarantined People be paid for loss of time by the State?

Should Practitioners be paid for reporting births, deaths and communicable diseases?

Should Consumptives be controlled or restricted in any way by Health Authorities?

Catarrh: What can Sanitary Science do to prevent its spread?

The Social Evil: What is the proper Sanitary view? Does Sanitary Science favor its legal license and control?

Tuesday evening, 8 P. M., Reception by the Faculty of The Medical College of Indiana, in their new building. Lecture by Theo. Potter, M. D., Professor of Bacteriology: "The Present Status of the Diphtheria Question?"

All are invited and requested to bring their friends.

The Faculty of the Medical College of Indiana extends a cordial invitation to an informal reception, in the new College Building, at 8 P. M., Tuesday, May 12, 1896. Theo. Potter, A. M., M. D., Professor of Bacteriology, will deliver an illustrated address upon "The Present Status of the Diphtheria Question."

REPORT OF SIXTH ANNUAL CONFERENCE OF STATE HEALTH OFFICERS.

The first session opened at 10:30 A. M., May 12, in room 12, State House. Meeting called to order by Douglas C. Ramsey, presiding officer.

Dr. Ramsey. It is highly gratifying to see so many earnest men devote their time and talents to the science of sanitation. I hope your deliberations will be governed by wisdom and prudence.

Governor Matthews. Gentlemen of the Sanitary and Health Department: I have come wholly unprepared to deliver anything like a formal address. I know it is needless for me to assure you that we are always glad to see you upon whom so much depends the happiness and prosperity of the people of the State; for without proper and due regard to the sanitary conditions of a people they can not be happy and prosperous. Therefore, to you the people of the State are greatly indebted for keeping alive an interest in the progress of these conditions to which you give an intelligent study and present to us in that way that results in our good.

I can not undertake to talk to you upon a matter which you have thoroughly studied and mastered and which I have not. We depend upon your judgment and wisdom to pilot us safely through. Since the creation of these Boards in the State, I don't know of anything that has made such rapid advancement as the work in which you are engaged. But a few years ago it was scarcely understood. In looking around me this morning I am glad to see such a good looking set of men. Your Secretary told me when he asked me to come here that that is the kind of men I should see. I heartily concur with him, and trust that for his having spoken in so complimentary and kind a way of you you will give him careful consideration and take good care of him during this meeting.

While this welcome in itself is brief, and by no means eloquent, yet it is hearty and sincere, and I welcome you, gentlemen, on behalf of the State of Indiana.

Dr. W. R. Francis. Mr. President, His Excellency the Governor, Gentlemen of the Convention: I believe that it is universally admitted that there is danger in ignorance and safety in

intelligence. I believe that that same proposition has been demonstrated perhaps more clearly throughout the State of Indiana by this organization than by any other within its bounds. This is a significant body, significant in different ways. First, it is significant for its unselfishness; second, for its devotion to a cause that almost appeared to be lost; and third, because it is actuated by motives that are absolutely for the good of the people. It is proverbial that the medical profession has from its earliest history down to to-day been in line with things that are absolutely unselfish and for the good of the people.

Gentlemen, we meet here to day for certain purposes and in obedience to certain conceived duties; not for self-aggrandizement, not for pay—because there is none in it—but for the good of the community in which we live, that the State of our adoption of birth may reap the benefits of the knowledge that we have attained through an honorable profession, and especially for the care of the health of the people.

Within my memory there was no such organization in this State that had any title to the name. Within my observation in the last very few years there has been a demonstration in a moderate way of what can be accomplished through the agency of the State Board of Health and its auxiliaries, providing only the people can be brought to a realizing sense of its existence and operation and give it a consequent liberal appropriation. It is a known fact, not only to the profession throughout the State, but to people in general, that in certain localities great good has been accomplished by this Board, and we are just on the eve of doing better things. We are just in our infancy; we have just been born.

Peace be to the ashes of the Secretary who was with us last year. He did his work well; he has gone to his reward; he has been succeeded by a gentleman who is eminently qualified and especially fitted for the work that has been laid out by this Board. It remains now for the Legislature of this State to appreciate this work and to strengthen his hands by an appropriation that is not merely a pittance, that is in keeping with the importance of the work, and that is a recognition of the intelligence of this State, and then the day of scarlet fever, diphtheria, small-pox, yellow fever and cholera shall be relegated to the past, and, in the words of the immortal general, "They shall be dreaded for what they have been, not for what they

are." They will have been brought under control, and those of us who shall see that day and who appreciate the importance of the work that is laid out by the little body of men who come here unselfishly and sow the seeds of the harvest that shall bring about such a result will be regarded with a great deal of satisfaction.

Dr. Griffith. It is meet that we should say a few words and drop a tear as we meet here together to the memory of the late Secretary. I was astonished when I heard of his death. I could not let this occasion go by without speaking a few words of the pleasant memory he left with me.

Dr. Leech. In all my life I have never known a man so unselfish and heroic as Dr. Metcalf was. We certainly have met with a great loss in his death.

It was moved by Dr. Hibbard that the President be requested to ask the chairmen of the several committees to call so many of their members together as are present and have a discussion of the matters they have in hand. Motion seconded and carried.

Dr. Hibbard appointed to preside while the committees met.

Roll-call of members of committees.

Meeting adjourned until 2 P. M.

Conference called to order at 2 P. M., May 12, Dr. Davis presiding.

Dr. Francis. Mr. President, the committee that I have the honor to be the chairman of is a committee with the special duty of securing additional appropriation. The scope of the committee is on the specific subject, and, as you know, in the absence of a knowledge of the personnel of the coming Legislature it would be absolutely impossible to do anything definite on that committee except make plans for the prosecution of its object. Incidentally, I have come in contact with a great many men who will probably be in the next Legislature. In other capacities I have traveled over this State considerably in the last six months, and wherever I have been in the counties or in the towns and cities where the men reside who will be members of the next Legislature, or probably members, I have taken pains to see them and ascertain something of the views that are prevalent among legislators as to the matter of appropriation for this Board. Now I have in mind a scheme,

formulated after a fashion that its operation ought to take effect soon, and it is this: The committee of which I am chairman is composed of about eight members. While I have not been in conference with other members of that committee personally, I have had some correspondence, and, in a sort of indefinite fashion, I have formulated this plan in my own mind.

At a date antedating the meeting of the Legislature some months, or perhaps in the early fall, to call that committee together for the idea of arriving at some specific method of reaching the object at which we aim. In the meantime, it is my intention to present to that committee this scheme, that the health officers of each county, the Secretaries of the Health Board in each county, should be enjoined to enlist the coöperation of the reputable profession. Now, I don't mean any school, but the reputable profession in that county, men on whom we can depend in the matter of honesty. First, enlist the coöperation of the members of the profession; second, personally and through the influence and assistance of the profession, bring to bear upon the members of the next Legislature the importance of the functions of this Board, and the absolute necessity of the sinews of war. Then, in addition to that, to get up a circular making, if you please, comparisons of effect in various States and comparisons of the amount of appropriations, and send that circular to the profession throughout the State, to the officials of each county, and especially to members who are to be of the next Legislature. By the aid of the health officers in the various counties, fortified by the influence and assistance of the profession, there is no question in my mind that the matter would be so placed before the members in advance of their meeting that it would begin to crystallize into a definite idea of the importance of the subject. Now the only hindrance in the way is the fact of unappreciation. You approach the average legislator, and the first thing he will tell you is that he believes, and the people believe, that this Board is created as a sort of sinecure—not only the State Board, but the local Boards—and for the purpose of rewarding some medical men from a political standpoint; and they, therefore, look upon the State Board of Health and the local Boards of Health as a band of robbers, as a class of men who

are seeking self-aggrandizement, and they have some sort of indefinite idea that somewhere or other they are getting a great big fee, and that you are just infringing on the rights of the people. This idea is giving way in a measure to a more enlightened influence that is brought to bear by the local Board. Now, after issuing these circulars setting forth detailed cases, as at Muncie, where there was a tremendous loss of life and property—a tremendous monetary loss caused by something, I will not say what—that could be corrected by an efficient Board; and then make other comparisons where the efficiency has been marked by the aptitude and energy of the health officers, as in my own city, where Dr. Lytle, by his efficiency and attention to duty, did shut off two threatened epidemics of small-pox. Make a comparison, then, in this circular of the expense entailed in these cases, and let that go to the profession and to members of the Legislature and county officials. After that has been accomplished, and later, when the Legislature meets in session and some reputable members of both houses have introduced, simultaneously, if it be possible, a bill that shall have been drawn up succinctly, that shall not have a whole lot of conditions to it that shall be fatal to it, that shall cover the ground with just as few words as possible, and that shall not engender the enmity of the profession, and that a committee, at the proper time, either the committee of which I have the honor to be chairman, or some other committee associated with the State Board of Health, meet here at the time that the matter is being considered and bring such personal and immediate influence, and to give instructions upon it, that it is bound to command the respect of the Legislature. Now, gentlemen, I believe as much as I believe in my existence if those things are carried out in the manner in which I have undertaken to detail them, crudely, perhaps, that this State will appreciate, in a part if not entirely, the necessity of additional appropriation. I believe there is no member of this Legislature, I believe there is no member of this great State with a single iota of sense, who will be willing to go on record again by making an appropriation of \$1,000 for the State Board of Health and \$6,000 to take care of the hogs. I believe that under thorough, full, persistent and aggressive efforts on the part of a reasonable and a persistent committee that

we will succeed in getting an appropriation somewhere near the measure of the needs of the case.

Now I wish to have, if I am to be continued on this committee, any suggestions that may be offered by the members here to-day. Of course, all of the things that I have detailed will require a little expense, not a great deal, and I suppose that expense must be borne by the State Board of Health, I know of no better way that you can expend a part of this little insignificant appropriation than to spend it in getting a more adequate appropriation. It seems to me that the whole force and the whole purpose, and everything else that is attached to the State Board of Health, depends upon the success of this committee.

Dr. Hibberd. We ought to give some consideration to this communication; it is really the foundation stone of future success. If you can not get some kind of money, gold or silver, or good paper to stand on, you must lay the foundation for a future crop of currency. So far as I understand the plan that has been suggested by the speaker here, I don't see for myself anything better. I have not given that point any amount of consideration. There are certainly right ways and wrong ways of doing any ordinary things. There will be a right way of doing a thing that has so much hanging on it as this State Board of Health. I don't think, taking it altogether for the past fifteen years, that we have made a fortune from the people of the State of Indiana. We can do a great deal more good if we get the people to see that we are working in the right way, and will get the Legislature to give money to support these efforts to do good.

Dr. Leech. We have generally found in our experience that a class of persons most indifferent to what health officials are trying to do are physicians. I have never been able to understand why this is so unless it is that in this competition by which the health officers are selected there is a certain amount of jealousy that finds its expression in an indifference to what he may be doing, and sometimes to an absolute hindrance. Judging by the experience I have had in past years I expect very little from the coöperation of physicians of this class, because they are usually indifferent to the subject. I believe, however, that good could be done by the organization of local sanitary

organizations. Get in a few women, college professors, teachers of high schools, and in fact an intelligent class of people, including ministers and lawyers, and form an association in every community and send petitions to the Legislature. Now, I have found in the attempt to secure legislation this idea of the mercenary character of the Boards of Health that has been spoken of. The thing we have had to combat has been always the statement that our appropriations are already too large and we have got to cut them down. They say we got along pretty well last year on \$1,000, and we will have to do it this year. Besides that, there are a great many bills, good bills, bills having intrinsic worth of their own, started in the Legislature that die still-born simply because they were side-tracked to make way for political bills and bills pushed by interested parties, and pushed with a vigor that we have not been able to exercise when we were pushing in a matter of benevolence. In fact, those bills of pure benevolence are generally side-tracked to make way for political and commercial measures. It seems to me that no intelligent person who has before him the records of the health service of Indiana could say that the bodies have been inefficient, that they have not deserved the patronage of the public. Take, for instance, the epidemic of small-pox in the city of Muncie. There is no where in sanitary records an instance where an epidemic has been stamped out so quickly and effectually as was done there. The first cases were reported in August, and by the latter part of October the quarantine was raised and the State Board of Health was told that not a single case existed in the city of Muncie. It is not doing justice to the health officers there to say they were inefficient. I never saw a more interested, painstaking, unselfish set of men in my life than were engaged in the health service at that time. They deserve all praise. I believe that you can do much more by the organization of local sanitary associations after the plan I have suggested, and also the absolutely necessary presence of three or four, at least, energetic, intelligent men working constantly in the Legislature and pushing this measure. You bring a bill there and it is referred to the committees, and if you do not urge it it will die right there. But if intelligent, active, energetic men are urging them to take cognizance of the bill and report it it will be done. After it is reported it must be brought before the body in which

it starts. The plan of introducing bills simultaneously before both houses is not best. It is best to start in one house and see it through that, and then see it through the other. It requires constant looking after from beginning to end. Sometimes a bill will reach its third reading and stop there. The bill for the contingent epidemic fund remained on the Speaker's desk until within four days of the close of the Legislature. I am satisfied that had it not been for the fact that forty members of the House of Representatives were brought to go one after another to the Speaker and ask as a personal favor that the bill be taken up, it would not have been done.

I will tell you what one of the Senators down there said to me. He said we expected the Legislature to act upon the bills, but that the regular physicians never wrote about them, while there was not a quack in the country that had not written to me urging certain measures. He said he had nothing at all from the regular physicians to base his claim upon. I know it would be a good thing after the Legislature meets to write letters and have something to work upon.

Dr. Griffiths. Inefficiency does not consist in the health officers; inefficiency consists in the conditions that surround them. I have had some experience as a health officer. About the time of the Muncie epidemic at a place about ten miles north of us they had nine or ten cases of small-pox within a certain time. Impressed with the idea that I was put there to do something, I took the responsibility of quarantining against that place and a place in Steuben County where they had one case, unsupported by the county board or the town board. The matter was thrown on my shoulders entirely. I forbade the railroads to allow any one to take passage from these places unless they had a certificate from the health officers of those places saying that there was no danger. That which came through from other places I could not interfere with, but that which came directly from the towns where they had small pox must not be taken unless they had certificates. This I did with all the roads. I incurred the maledictions of the people of both those places, but did my duty. The result was we had no small-pox in our town, and I did receive the encomiums of some of our people. Now the fees of health officers are hardly sufficient, and there should be an effort on the part of Dr. Francis and his committee to bring about an additional appropriation

for the State Board of Health. I should like to see incorporated in that law giving the health officers a certain per cent. for each thousand they represent, twenty or twenty-five dollars for each thousand they represent, which, in a county like ours, of fifteen thousand, would bring the health officers three hundred or three hundred and fifty dollars. Write to our representatives, then, and urge that the appropriation for the State Board of Health be increased to at least ten thousand dollars, and incorporate the idea of compensating the health officers according to the importance of the positions they hold.

Dr. Hurty. I am sure that we will not have to argue long that we must have money, but we must show the legislators of the State of Indiana that the Health Board can save the State vast sums of money before they will be willing to make an appropriation. The present law is not adequate to the situation. It does not give power enough; it has not a wide enough scope; it is not up to date. And it seems to me, before we ask for an increased appropriation, that the first step is to get the right kind of a statute. As an instance showing the lameness of the present statute, if the Central Board of Health will apply sanitary science throughout the State it must first know where to apply that science, and the very first step we must take is to find where the sickness and death is, where the unsanitary conditions are that must be removed. How is that to be done? It is to be done by collecting vital statistics. In that particular our present statute is very lame. The vital statistics which the State Board of Health collect are next to valueless; they have little worth, simply because they are not true. You gentlemen who are secretaries of County Boards of Health know that physicians do not report all of the births, nor all of the deaths, nor all of the communicable diseases. What proportion are left out? Say that this Board here in the capital was equipped with all the money and all the power you could give it—if it did not have this knowledge, how would it be efficient? So the first thing that we must do is to ask for a new statute. This is not the only object. Having a new statute, and being able to point out to the legislators where we can effect an immense saving of money, then we can get the appropriation without trouble. Let me tell you where we can effect a saving of several millions that go to waste unnecessarily. If

we make it plain that we can save millions we will get our appropriation. Suppose, now, that this new law turned over to the health officers of the State (and that is where it should be), the care of the life and the health of the stock of the State. We are medical men, and with us the health and the life of the animals should rest. Of course, at the same time there is a Live Stock Commission, and the statutes say that it shall be composed of three practical agriculturists, and it gives them \$6,000. Why should the State give three practical agriculturists the care of the health of the live stock of the State? Why do they not place them in charge of the law affairs instead of the lawyers? Why not put them in charge of the insane? It would be just as sensible; therefore the law is obviously a mistake. If this were called to the attention of the legislators they would remedy it.

In this room in November the Swine Breeders met. They had a committee appointed to carefully advise how much money was lost annually by hog cholera in Indiana. They reported that nearly five millions was lost annually by hog cholera. Afterward it was simmered down that it was not possible to have a less loss than three millions in hogs alone. Every one of us knows that this is unnecessary. There is no need of it at all. Apply sanitary science to the care of the hogs of the State, and the three millions can be saved. That, a properly constituted health department would do.

Then there are the other animals that are dying unnecessarily. And we have not touched upon the human family, where millions could be saved. In 1895 we had 2,400 deaths from typhoid fever in Indiana. There were 12,000 cases. What proportion of that, think you, has been demonstrated as unnecessary? It has been demonstrated absolutely that eighty per cent. is unnecessary. Now, what is the pecuniary expression for that fearful loss? Let us get it into money. Twenty-four hundred deaths. The United States values every man, woman and child, every idiot and every cripple, for military purposes, at \$1,000. Let one of you be killed on the cars, and you know the railroad companies will be obliged to pay \$10,000. So call it a thousand dollars. Twenty-four hundred deaths at \$1,000 apiece means \$2,400,000. All this is not theory; it is demonstration. To-day, in Berlin, if typhoid fever were to break out the health officer would be indicted for murder.

He has the power, and is expected to keep it out. Now, these are demonstrated facts; not guess work, not theory. Eighty per cent. can be saved. But there were twelve thousand cases of typhoid fever, and eighty per cent. of this is 9,600 cases of typhoid which need not have been. Typhoid fever takes those who are in the prime of life. It does not, as a rule, take youth and old age; it is the man in the prime of life, when the State wants him for military, social and legislative duty. Of course children and old people get it, but not often. Add up the total savings on typhoid fever which are possible; which, in fact, it is a sin for this State not to save, and it amounts to almost \$5,000,000 on typhoid fever alone, and sanitary science stands ready to save it to this State. There are things in every community that operate to keep one down, that hold us back, and the community wonders why we do not get on. This heavy load is upon the shoulders of the State of Indiana. Now, should we not remove it? We have but to educate the people, instruct them, point out to them, and they can not refuse to accept these figures. If they do reject them it will be from ignorance and stupidity, and you know in the face of stupidity the gods themselves are helpless. But there are enough intelligent people, and when these facts are brought before them, the Legislature will eagerly give the appropriation that is necessary.

To return to the hogs. Sanitary science could easily stop 90 per cent. of hog cholera—we ought to stop all of it. For nine years at Judge Martindale's farm there has not been a case, for he maintains a perpetual quarantine. Suppose you let glanders go on; not only all the horses but all the people would have it. But the animals with glanders are destroyed and put out of the way. Let us get hog cholera out of the way, and what would it do besides saving the \$3,000,000 that are lost annually? Do you not see that it would bring security to hog raising? There would be the birth of a new industry because it is making secure an old one. We should draw up a proper statute that would give to the State Board laboratories, and experts should give instructions in all the counties.

You may want to know why we say that 80 per cent. of the typhoid deaths can be prevented. It has been done in Berlin, it has been done in Leipsic, it has been done in London. The city of Lawrence, Mass., is on the Merrimac River; above Lawrence is Lowell and other cities that pour their sewage

into the river. They have no filtration in the towns above, but in Lawrence the water filters have practically banished typhoid fever. To have a case originate there is considered an anomaly, and they conclude that the man who has it contracted it in some other place.

Now I say that after we have instructed the Legislature and the people, and shown them that an enormous saving can be accomplished, and they still refuse to make the appropriation, they commit a sin, and think how just it would be if in the course of nature they should be slain like flies. I think if we get a proper health law passed the question of appropriation will be solved.

Dr. Griffith. We have thirty physicians in Lagrange, and I think I can speak for twenty-five of them, and I know they report contagious and infectious diseases always. I think I have reports of every contagious and infectious disease that existed in Lagrange during the year; but I am sorry to say that there are a few who see no value in these reports, and they are derelict in reporting, one saying that it is all nonsense and another that he can see no good in it.

Dr. Hanmore. I have had some trouble in getting reports in some cases of contagious diseases, and I don't know how to remedy it. An instance of this kind occurred with me last winter. Out in the northeastern part of the county I was summoned to go and examine some cases that were supposed to be diphtheria. I went, and found a little girl about thirteen had died, another girl, a boy and the father were sick when I got there. I examined the cases carefully and pronounced them diphtheria. There was no need of any person being mistaken in the cases. The attending physician was not present, and I wrote a note, sealed it and left it for him, and was leaving the house when I met another physician, who had been called in to consult with this one. We went in together, examined the cases, and I left instructions and also some cards to fasten up, and we agreed upon the cases. I heard nothing more from them for four or five days, when a report came that the father had died, and a week or so later the other girl died, making three out of a family of five that died; four of the family had had the disease. Those physicians practically said that there was no diphtheria about it, and still maintain that. For the first child that died they had a funeral in the church, but the next

one, by my instructions, had no public funeral. Now, in such cases I have not even yet received a report of the deaths in that family, and I am unable to get the reports. I have told the physician and written to him that a report must be forwarded. Neither have I been able to receive from him birth reports. These are some of the troubles that we meet. At this time I was watching very carefully and very interestedly Dr. Lytle's cases at Marion. Our town Boards throughout the county, of which there are five, I have received no reports from the secretaries of three of them. Why they do not report, I can not tell. I think our county hardly pays the secretaries enough to justify them in going eighteen or twenty miles to hunt up those reports. If, as I recommended to them some time ago, they would even bear the expenses, I would get those reports, and we would be able to send in better reports ourselves. In regard to organizing, I made an attempt last fall to organize a sanitary organization in the county. I had selected for the purpose in our town the principal of the schools, one attorney, the town health officers and myself. I intended in other towns for other organizations to be effected, composed of the principal of the schools and either an attorney or a justice of the peace and the local health officers, and after that had been effected and in working order, to have a county association. I started out well, but failed. I had an attorney and the local health officer meet with me, and it was the last time that I could bring them together to take steps toward an organization. Dr. Walker made the same effort in his town. He also has his difficulties to meet, for there is a mortal fear that somebody will lose a vote at the next election if they take any steps towards removing obnoxious places or things that cause disease. There seems to be a fear in some places, at least it is in our county, that the health officer is liable to persecute somebody. If they have a well that has not good water in it, they think his whole object is to make them stop using that water. It has been a puzzle to me how to remove this difficulty. I thought I could manage it when I commenced, but I made a failure of it. However, we have been able in every outbreak of contagious disease to subdue it and smother it out. Diphtheria in a mild form and scarlet fever has made its appearance in different parts of the county, but it was confined to the places where it originated.

Dr. Hibberd. Allow me to ask the Doctor why he did not try to make those people report, he had the authority in his hands? What is the law for, if not for such cases as that? Did you never try to think of trying the law on those fellows to make them report?

Dr. Hanman. I thought of it, but here was where I felt that I was in the minority. There were three physicians who met there, and one of them, this one that had met me and had agreed with me that it was diphtheria, and had agreed in the presence of a member of the family and a minister that was present. Now when doctors will form a combination against a health officer and go into a compact to stick to it regardless of consequences, I felt that I would be in the minority. He keeps promising to report the deaths, but has not done so yet.

Dr. Leech's paper read.

TO DEVISE PLANS TO MEET EMERGENCIES.

BY DR. LEECH.

"As chairman of the committee, 'to devise plans to meet emergencies,' I wrote to each member of the committee, soon after our last meeting, urging them to commence at once to collect material for our report at this meeting. The consensus of their replies was, that men who knew the least, did the most talking, and consequently they nearly all showed themselves to be very wise by not saying anything. This is to be regretted, because it is from such men that we expect to hear something that will assist us in the performance of our duties as health officers. We don't expect men, who have been in office only a short time, to write a book on sanitary science, but they can at least give us the benefit of their experiences.

"For my own part I had to devise plans to meet some emergencies. During the past year I received a dispatch from a distant city, saying that Miss B., who lives at No. ——— street, Crawfordsville, Ind., had been exposed to small-pox, and had returned to her home. I immediately quarantined her at her home, vaccinated her, and had her person and clothing thoroughly disinfected, keeping faithful guards on duty

day and night. As at Muncie, Satan came also. There were 1,000 people and two newspapers that new just what to do and made things ring because I didn't do to suit them. Unfortunately we had no pest-house, but we proceeded to build one and soon had her in it. Even the pest house wasn't located to suit everybody. Some people seemed to think that everybody in sight of it was in danger of contracting the disease. Fortunately our subject escaped having the dreaded disease, and we have a new pest-house in which to quarantine our next patient. It is a good plan to have a man of experience for your Secretary of the Board of Health, and not change every time there is a change in the Town Council. The civil service rules should apply in this case, if in no other.

"A case of diphtheria occurred in a family numbering eight persons. The house was quarantined and kept so until all danger had passed and the premises and people thoroughly cleaned and disinfected. To be ready for such a case, the Secretary should have the names of all persons who are qualified and willing to go into such a house to nurse or guard, otherwise much valuable time will be lost in hunting them up. We succeeded in confining the disease to the one house. A case of diphtheria was reported in a boarding house, where a quarantine would have worked a great hardship to the people running it. I visited the case myself, much against the will of the attending physician, who seemed very much elated over the prospect of treating a case with antitoxin. I advised delay in posting the house, and after twenty-four hours we were able to say with a degree of certainty that the disease was not diphtheria, which proved to be correct to the great satisfaction of everybody concerned. The doctor who says some dire calamity 'is threatened, or there is a tendency to some terrible disease unless my medicine takes hold,' is thus forestalled, to his reputation's loss, but to the patient and the patient's friends, gain. I might mention other cases, but these will suffice to acquaint you with the manner of my procedure, which is, if you do err, always err on the side of safety.

"The first thing to do, in every case, is to diagnose the disease, and to do this there should be a bacteriological laboratory in every county, and the County Commissioners should appropriate money to establish it. The public health would be conserved by it, and the owners of all kinds of domestic

animals would be benefited to such a degree that the cost of establishing and running such an institution would sink into insignificance. Science is making such great strides nowadays, that the scientist must occasionally double quick in order to keep up with the band wagon."

DISCUSSION.

Dr. Leech. I think a great deal of benefit can be derived from our meetings. No doubt the person who formulated this committee meant well, but he was not specific enough.

Dr. Stout. I don't mean to criticize the Doctor or any brother, but I must say my friend here failed to do his duty in a measure in not securing reports from his fellow doctors in his committee. As you are all aware, this work has been left usually to the lowest bidder in different counties, and in a great many instances it has been so low that it did not justify any doctor who had much business on hands to look after. For that reason I would hold any doctor responsible for taking a contract of that kind at a price that he could not afford to do the work for. I would not do it, and I believe I am as needy as any doctor here. In our own county the work was let at \$10, and the result was that the doctor who took it had a great deal of work on hands and could not attend to it. He neglected it, as a great many health officers have done, and in December this contract was awarded to me. I went before the County Commissioners, and I knew something of the way the reporting part of it had been conducted, and I told them I was satisfied no one could do it for less than two or three hundred dollars; but I would contract to do the work for one year for \$200, and I would agree to visit, if necessary, each and every part of the county and look after all irregularities as best I could, they to defray my expenses in such trips and to pay for the stationery, and to pay my expenses here to this meeting, if necessary. I had that in a contract. I wrote a card to each physician in the county notifying them that I had been appointed as the Secretary of the Board of Health, and asked them to make all the reports promptly, to report all contagious and infectious diseases at once, births and deaths any time within the quarter, and a report was due then. I did not get any response from many of them. We have about 38.

I wrote a letter and had 250 printed; it was a letter of warning, and I cited them to the penalty on the back of the blank, and told them that I hoped I would not be called upon to prosecute anybody, but on failure to live in strict keeping with the rules some one would get into trouble. A great many of the doctors got hot at me. One of them wrote me a very insulting letter. Of course I was highly enraged and sat down and wrote him one, and in a few days he wrote me another letter, a very nice one, and made all the apologies necessary, and we are now the best of friends and I hope will remain so. But one physician told the city health officer that he did not mean to report any cases at all. I knew of a couple of births he had had, and I wrote him and told him, if, after five days, they were not reported, suit would be instituted against him, and I proposed to push it without mercy. In about two days I had a letter from him. He had gone visiting, and he wrote very nicely and said he had been called away to attend a friend, and could not report promptly, but would as soon as he got home, and asked me on account of sickness where he was visiting not to push the matter. At the bottom of his letter he said: "I like your letter first rate." I think that is the only way to get reports. Doctors will become a little negligent and will not do it unless they know they have to. A great many of the doctors got angry at me and said things about me on account of it, such as saying that I had exerted a great deal of authority, but I paid no attention to it and got good reports and am keeping the work up. As to this case of diphtheria, I will tell you what I would have done, and what I have done in two cases this winter. We have an irregular way of practicing in our place, and another doctor reported to me that he had a case of scarlet fever a little east of the town. He said he was calling the cases diphtheria, and would like to have me go out and examine them. Well, I got in the buggy with the doctor and we drove out to see the cases, and they were both scarlet fever, well-marked cases. We quarantined the house—there was a school house on the same farm. We drove over to the other house and went in to see the patient, and the lady who admitted us said that it was a very bad case of diphtheria. We asked to see the patient, and it was a well-marked case of scarlet fever. There was no diphtheria about it. But in the case of the doctor here, if I had gone to

see the cases and diagnosed them as diphtheria I would have stayed with them, and if those men persisted in denying it I would have called other expert testimony, I would have called the doctors of the State Board of Health if necessary. I look over all these cases myself and put up the necessary flags, and I do not allow them to be removed, and give full instructions not to remove them until the attending physician says that there is no danger and brings a certificate to me to that effect. Some of you have spoken of small-pox. We had a scourge of it in our place last year. A lady came from Champaign, Illinois, and went to her home and it was detected at once and removed south of the town about three miles. There were five cases, all from the house where she went first. It was stamped out successfully, and it was done by the local Board and the city health officers.

I would like to speak on another matter. I think it is altogether out of place, in fact it is not the thing to have in existence, to have the County Commissioners act as Boards of Health. They know nothing of the duties of health officers. They don't, as a rule, know enough to procure and employ a secretary. They look at it as a matter that should not be paid for at all, or the majority would employ a man at ten or fifteen dollars if they could get him, whether he fulfilled the duties of a secretary or not. I believe that each County Board of Health should be composed of four or five physicians, and that a secretary should be one of that number, and should serve not less than two years, and that there should be a fixed salary large enough to justify him in employing some boy or young lady to do all this office work, and the other part of it, so far as visiting or looking after the sanitary condition of the county is concerned, would be a small matter if he had this office work done. It would take from five to six days each quarter to record all the matter that you have to record, and make your reports and get them to the State Secretary.

Mr. Hamilton's paper read.

POWERS, DUTIES AND LIABILITIES OF BOARDS OF HEALTH.

BY DR. HAMILTON.

Mr. President. The committee appointed by the chair to define the duties and powers of health officers at the last meeting, held in this city, beg leave to make the following report:

Concerning the powers, duties and liabilities of Boards of Health, the subject may be treated under each classification above indicated, considering under the first classification the powers, as they now exist, and secondly, suggestions for legislative action, whereby these powers may be more clearly defined, limited, or extended.

I. POWERS OF BOARDS OF HEALTH AND HEALTH OFFICERS.

Such boards and officers and instrumentalities of the executive department of the State and are charged with the execution of one of the most important parts of that large and illy defined power known as the "police power," as it relates to the care and preservation of the health of the community and the individuals thereof.

The practical question which presents itself to every health office in any given case, of the proposed declaration, or abatement of a nuisance, or the forcible removal, or confinement of a citizen, affected with an infectious or contagious disease, is: What power have I to act and enforce my decisions, and will the proposed action violate any legal and constitutional rights of the citizen?

The charter of power conferred upon health boards and their officers in the State of Indiana is the act of the Legislature which became a law without the approval of the Governor, February 19, 1891 (Acts 1891, p. 15).

By the act there is established :

First, a State Board of Health ; second, County Boards of Health, subordinate to the State Board ; third, Town and City Boards of Health, which are subordinate and answerable to the county boards of the county in which such towns and cities are situated.

As to the relative duties and powers of these respective boards, the statute is very indefinite.

Much is left to inference and construction from the moral "subordinate" and the duties of each board specifically prescribed by statute.

Thus :

"The State Board shall adopt rules and by-laws, subject to the provisions of this act and in harmony with other statutes in relation to public health, to prevent outbreaks and spread contagious and infectious diseases."

"Shall have the general supervision of the health and life of the citizens of the State."

"Shall make sanitary investigations and inquiries respecting causes of disease, and especially of epidemics."

"To regulate and prescribe the location of plumbing, drainage, water supply, disposal of excreta, heating and ventilation of any public buildings or institutions, and inspect the same."

It was evidently the legislative intent that the duties of the State Board should be far more than clerical and statistical office work. It occupies the relation to the local boards of the commanding general in the field. In case of subordination, or failure and neglect of duty on the part of the local boards, it is the province of the State Board to take the active and personal control of the disease stricken district and superintend the work of extermination ; and where the local health office shall fail and refuse to enforce the rules and regulations of the State Board, to prosecute him under section 9 of the statute.

It is made the duty of the County Board of Health to promulgate and enforce all rules and regulations of the State Board of Health in their respective counties which may be issued from time to time.

To promulgate the rules, means to publish them in one or more newspapers of general circulation in the county, and a copy of such publication with an affidavit of the editor or publisher attached, should be preserved and kept on file in the

office of the local health officer. The rules have no binding force until thus promulgated, and in any prosecution for the violation thereof, it would be necessary to allege and prove the promulgation.

The statute does not require that city and town boards shall promulgate the rules, promulgation by the county answering for the whole county including towns and cities therein located. The city and town boards are subordinate to the county boards, and are deemed the assistants of the county boards in that part of the county embraced within the city or town, as well as having such immediate care of the health of their respective towns and cities as good administration would dictate, and in enforcing the promulgated rules of the State Board of Health therein.

For the removal and abatement of nuisance, and carrying out and enforcing sanitary regulations the Common Councils of city, acting as a health board, have jurisdiction two miles beyond the city limits. This subordination implies that the county boards have supervisory power in towns and cities, to see that the rules and regulations of the State Board are enforced therein; and on failure, neglect or refusal of the city or town board to enforce them, to take active charge, and enforce them itself, and prosecute the town or city officer for his failure and refusal. The mode of enforcing the promulgated rules and regulations of the State Board of Health against the private citizen is chiefly by prosecution under the statute. Where these rules are persistently violated, it is prudent in practical operation to notify the citizen of the fact, and enclose him a copy of the specific rule; and if he still persists, prosecution is usually the effective remedy, which it is the duty of the health officer in charge to institute through the prosecuting attorney.

In the power to adopt and promulgate rules and by-laws for the preservation of the public health, the violation of which shall constitute a misdemeanor, the State Board of Health is vested with a peculiar and delicate *quasi*-legislative function.

The idea of the Legislature delegating to a subordinate branch of the executive department the power to pass rules, the violation of which shall be a misdemeanor, is anomalous in the State of Indiana and finds no precedent aside from the case of municipalities, to which such powers, in a limited way, are granted,

but on the express ground that they are instrumentalities of local government, and prosecutions for the violation of municipal ordinances are held to be civil and not criminal actions.

The Constitution provides: "The legislative authority of the State shall be vested in the General Assembly; * * * And no law shall be enacted except by bill."

One of the first acts of the Legislature passed after the adoption of the present Constitution (Sec. 237, Revised Statutes of 1894) provides: "Crimes and misdemeanors shall be defined and the punishment therefor fixed, by statutes of this State, and not otherwise."

While the statute has been held not binding upon future assemblies (28 Ind. Rev. 364) it has been so often cited and approved and is so consonant with the spirit of our Constitution that it has certainly become a rule of judicial construction.

On the contrary, in *L. E. & W. Rd. Co. vs. James* (10 Ind. App. 550), in discussing the right of the railroad company to refuse to transport a dead body when the shipper had not complied with the rules of the State Board of Health, it is held:

"That the Legislature may confer upon the Board of Health power to make reasonable rules and regulations for the preservation of the public health is not controverted. Powers thus given should be construed liberally for the advancement of the purposes for which they were bestowed.

"It was clearly within the power of the Board of Health to make the regulations set out above, with reference to the transmission of dead bodies. Such provisions, reasonable in their character, should be upheld and sustained by the courts."

Two Judges of the court dissent from this opinion, principally on a question of pleading, but in the dissenting opinion of Lotz, Chief Justice, it is said: "The former opinion of the court proceeded upon the theory that the court may take judicial knowledge of such rules, and that they have the same force and effect as general statutes. In my judgment these rules have no more force than the by-laws of a corporation or the ordinances of a city, and can only be brought to the attention of a court by specially pleading the same."

When it is considered that the prevailing decision in this case was made by a bare majority of the court, and that, too, in a matter involving only civil rights, it is important that the health officers of the State should, at the earliest practicable

time, seek occasion to inquire of the judiciary: What is the legal status of the rules of the State Board of Health? Can a citizen be indicted, convicted and deprived of his personal liberty for a violation of them?

If these rules and the statutes authorizing them be unconstitutional and void, in so far they attempt to provide a criminal remedy, they will furnish no justification to the health officer who institutes an arrest for their violation.

While the power of Boards of Health to make rules, the violation of which is made a misdemeanor, is supported in a few of the States of the union, judicial authority on the question is meager, and largely turns on the fullness of the statutory powers granted. The current of the decisions is that such rules should be liberally construed and upheld, so as to effectuate the purpose of their enactment.

Assuming that the statute of Indiana, making the violations of the rules of the Board of Health a misdemeanor is valid, and that one efficient means for their enforcement by the health officer is thus provided, we proceed to consider the requisite character of the rules themselves.

First, they must be reasonable.

Like the ordinance of a city passed, under a general grant of legislative power, the reasonableness of the rule is subject to judicial control, whenever questioned by a citizen affected by their attempted enforcement.

The object to be attained must be well within the purview of the preservation of the public health, and the means adopted must not necessarily impinge upon constitutional right of private property and personal liberty; the prime consideration being, that a citizen shall only be prohibited from so using his property or personal liberty as to result in injury to the health of his neighbor or the community.

Secondly, the rules should be definite and specific as to the person who may be charged with their violation, or whose duty it is made to obey; and also, as to the act, the omission or commission of which shall constitute a violation.

The rule should be drafted in a mandatory, and not an advisory form.

The form of an information for the violation of a rule should be as follows:

That A on the day of, 18..., at and in the county of, in the State of Indiana, did then and there unlawfully violate a certain rule, No., of the Board of Health of the State of Indiana, which had been duly promulgated in said county by publication thereof in the, a public newspaper of general circulation printed and published in said county, and which rule is in the words following, to wit:

(Here insert the rule at length.)

by then and there unlawfully (Here set the act constituting the violation in the language, as near as may be, of the rule, except to charge the doing of the opposite of what the rule commands or prohibits.)

Contrary to the form of the statute in such case made and provided.

An attempt to formulate an information as above, upon many of the present rules of the State Board will develop at once their want of definiteness as to: First, the person to be charged; and secondly, the act which shall constitute the violation.

To illustrate, take Rule No. 1: "No person affected with any contagious or infectious disease shall be admitted into any public school."

Against whom is this rule directed?

Whose duty is it to see that the infected person is not admitted? Is it the teacher? The rule does not say so. Is it the School Trustees? The rule sayeth not. Is it the parent, guardian or person having charge of the infected person and who sends the person for admission? The rule is silent.

It can not be the infected person, who procures himself to be admitted, because the rule plainly implies that the infected person applies or presents himself for admission, and is admitted by some person in authority.

A like objection applies to Rules Nos. 2, 7, 8 and 10.

Rule No. 3 furnishes an illustration of uncertainty as to the act which shall constitute a violation.

It provides: "Local Boards shall exercise special supervision over the location, drainage, water supply, heating, ventilation, plumbing, and disposal of excreta of schools, and when any hygienic faults are found, it shall be their duty to notify immediately the proper authorities and cause the same to be corrected."

What shall constitute "hygienic faults" is not defined by the rule.

The local officer is not authorized to make rules, much less give verbal directions. His province is to inspect and enforce the rules of the State Board.

Then he has no "hygienic faults" which he can prohibit or have corrected. But suppose he finds what he may deem "hygienic faults," and notifies the proper authorities, how can he obey the injunction "to cause the same to be corrected?"

He has no funds at his command, and School Trustees are not amenable to his verbal dictation, and it is made no offense on their part to refuse. The Health Officer is left powerless under the rule, to cause hygienic faults to be corrected.

Again: In rule No. II it is made the duty of the local Health Officer (under penalty, of course,) to compel a vaccination of all exposed persons; but the rule neglected to make it the corresponding duty of the exposed person to be vaccinated. On refusal the Health Officer is powerless.

The Secretaries of the various Boards of Health are defined by statute to be the executive officer of the Board. Except in the case of the State Board of Health, they are not members of their respective Boards and have no vote. The Secretary of the State Board, being a member of the Board, it is deemed, can not vote for himself for Secretary, that being an office within the bestowal of the Board.

Hornung vs. State *ex rel.*, 116 Ind. 458.

The statute therefore implies that the respective Boards shall, at stated or called meetings, order and direct, and that the Secretary shall *execute* the orders. It is advisable for the Secretary in any important matter to call the Board together and receive their sanction and approval of any proposed action. A record of such orders should be kept as a justification to the Secretary in their execution.

The clerical and statistical duties of the office are for the Secretary alone, and are defined by the statute. It is also the individual duty of the Secretaries to promulgate and enforce the rules of the State Board of Health.

In addition to the power of the criminal law to enforce the rules of the State Board, the local Boards also have varied summary powers over nuisances, detention and removal of infected persons, and establishment of hospitals.

Nuisances are public and private. Boards of Health have only to do with such nuisances as are calculated to injure the public health.

If a public nuisance exists the efficient remedy is to order its removal, and if refused, to institute a public prosecution through the Prosecuting Attorney.

In such case the statute provides that it may be a part of the judgment that the nuisance be abated. Abatement should be the prime object of the Health Officer, the mere punishment of the offender being left to proper officer; and he should see that abatement is prayed in the information, and granted in the judgment, and that the officer executes the judgment.

Private nuisances are defined to be anything done to the hurt or the annoyance of the lands, tenements or hereditaments of another.

It is not conceived that such nuisances can come within the jurisdiction of the Health Officer; and he should see that he is not made the vehicle of private vengeance and spite to effect the abatement of that which is only a private annoyance, and not injurious to health.

It is conceived that his whole duty as to nuisances applies only to those things deleterious to the public health, which are offensive to the sight, smell or hearing, erected or carried on in a public place where the people dwell or pass, or have the right to pass, to their annoyance.

As to public nuisances the Board of Health have the power, as does a private citizen, to abate them by force and in a summary manner.

But in doing so the Board assumes the responsibility, if called upon to answer in damages, of proving that the thing abated was a public nuisance, unless it be a nuisance *per se*.

Nuisances *per se* are defined to be: Those erections which, although necessary, have been ascertained by experience and adjudicated by law as nuisances, when so located as to be indecent and offensive to the senses, and to essentially interfere with the free use and comfortable enjoyment of property.

As adjudicated examples, may be cited the following:

1. Slaughter houses in or near cities or roads.

98 Ind. R. 73.

2. Tallow, soap and bone factories, when erected in public places or near the habitation of man.

4th Wait's Actions and Defenses, 753.

3. Pest houses;
4. Powder houses;

5. Privies located near the habitations of others;
 16 Am. and Eng. Enc. of Law, 955.
 4th Wait's Act. and Def. 752.
 Word on Nuisances, 579.

In Indiana a privy three and a half feet from plaintiff's dining-room and kitchen was held a nuisance subject to injunction before it was erected.

138 Ind. 582.

In Illinois, a privy on an adjoining lot, eight feet from the plaintiff's residence, was adjudged a nuisance in fact.

76 Ill. 322.

In Kentucky defendant was enjoined from building a privy on his own lot within ten feet of plaintiff's well, and thirteen feet from his dining-room and bed-room.

18 S. W. Rept. 529.

Erections in themselves lawful and useful, and not inherently injurious or offensive, are not nuisances in fact or *per se*, but may become so by misuse.

Such are mills and factories in populous cities; livery stables; private stables; blacksmith shops; hog styles and cattle yards.

Abatement of the latter class of alleged nuisances, summarily and by force, is always at the risk of the Health Board being able to prove that the thing abated had become a nuisance in fact by misuse. It is seldom necessary or prudent for the health officer to assume this responsibility.

Boards of Health or Common Councils, nor even the Legislature itself, has power to declare that a nuisance which in fact is not such, nor was not so at common law. Such declaration is no justification for the abatement of the thing, if upon judicial investigation it be found otherwise.

The determination of the existence of a nuisance is a judicial act and belongs to the courts, which are always open; and appeal to their ordinary procedure is in all cases recommended to the health office.

If the thing complained of be a nuisance *per se*, the easier your case; if not, the more you stand in need of the judgment of a court as a protection from personal liability.

Next, of the power to remove and confine infected persons.

Tideman on Limitations of the Police Power, sec. 42, says:

"The right of the State, through its proper officer, to place in confinement and subject to regular medical treatment those

who are suffering from contagious or infectious disease, on account of the danger to which the public would be exposed if they were permitted to go at large, is so free from doubt that it has rarely been questioned. The danger to the public health is a sufficient ground for the exercise of the police power in restraint of the liberty of the persons. This right is not only recognized in cases where the patient would suffer from neglect, but also where he would have the proper attention at the hands of his relatives.

"While humanitarian impulses would prompt such interference for the benefit of the homeless, the power to confine and subject by force to medical treatment those who are afflicted with a contagious or infectious disease rests upon the danger to the public, and it can be exercised, even to the extent of transporting to a common hospital, or lazaretto, those who are properly cared for by friends and relatives, if the public safety shall require it."

This is a strong statement of power, and it must be conceded that the current of judicial opinion sustains the text.

And yet, on careful reading, it is somewhat guarded.

The ground for the power, says the text, is the danger to which the public would be exposed, "*if the patient were suffered to go at large.*"

Against: It may be exercised by taking the patient from the proper care of his friends and relatives, "*if the public safety should require it.*" Reasonableness is the rule of executing the power. If the infected person be in a hotel or other public place, the public safety might require that the power be exercised in all its rigor; while if he be properly and seclusively housed in his own home, his family observing the proper precautions, his removal would seem an excessive exercise of the power.

It was early held in New York, that a person sick, even with an infectious disease, in his own house, is not a nuisance.

2 Barbour, 104.

In Massachusetts it is held, that the mere fact that small-pox exists on parties' premises does not authorize a member of the Board of Health to station such persons as he may deem necessary on or about the premises to guard ingress or egress, for the purpose of preventing the spread of the disease.

140 Mass. 314.

It is not only necessary that the patient be infected ; he must do, or threaten to do, or be in such location as that the public health is endangered, in order to authorize his removal.

As a safe and reasonable rule on the subject of quarantine, the following sections of the health ordinances of the city of Connersville, Indiana, are submitted :

Section 4. When it shall be so determined and published by said Board of Health that such epidemic exists in said city, said Board of Health is hereby invested with power, for and on behalf of said city, to procure by lease, or otherwise, and to construct, establish and furnish a suitable hospital, to be located at some isolated place, for the quarantine and treatment of all persons infected or exposed to said contagious or epidemic disease, and who shall be found on the public streets, or at public resorts, or other public places, in violation of the aforesaid rules numbered one (1), two (2), six (6), seven (7), eight (8) and ten (10), (being the rules of the State Board).

Whenever said Board of Health, or its executive officer, during the prevalence of such epidemic, shall find any person so infected, in any public place or resort, in violation of said rules, it shall at once cause such person to be removed to such hospital and there quarantined and treated until released therefrom upon the certificate of said health officer, as provided in said rules ; and to effect said removal and quarantine, said Board of Health shall have the power to call to its assistance the police force of said city.

Said Board of Health shall provide said hospital with the necessary attendants, nurses and physicians.

SEC. 5. Whenever any house, room or other place of human residence in said city, or the residents or occupants thereof, shall become infected with any contagious disease, so that said disease shall become pestilential in such house, room, or place of residence, and the residents or occupants of such house, room, or place of residence shall be found by said Board of Health violating any of the aforesaid rules herein adopted and promulgated, said Board of Health shall have the power, after giving the owner, householder, or occupant thereof written notice of the time and place of a hearing before said Board, as to the public necessity therefor, to declare and place said house, room, or place of residence under quarantine, during the existence of such contagious disease therein, and to confine all residents and

occupants of said place therein, during the existence of said disease therein, and until discharged therefrom upon the certificate of said health officer, as provided in said rules.

And said Board of Health shall have the power to enforce said quarantine against said house, room, or place of residence and the residents and occupants thereof, by calling to its assistance the police force of said city.

It will be noticed that the above ordinance bases the right of removal and quarantine upon the safe ground of the violation of the rules of the State Board, whereby the public health is endangered, and that, too, after notice and right to a hearing.

Boards of Health have inherent power to establish hospitals for the treatment of infected persons. They can not impress property for that purpose, nor can such hospital be located where it will be, or become, a nuisance.

For this purpose City Councils and County Commissioners have the power of taxation to provide the means, and it is their duty to furnish a reasonably comfortable place for the patients and to provide it with ample medicines, physicians, nurses and sustenance.

The patient should not be removed when such removal would endanger his life. The want of due care and caution in the removal of the infected, or their treatment and nursing when removed, will render the health authorities responsible for the damages that may result.

All expenses of the hospital must be paid by the public, notwithstanding the financial ability of the patient to pay them.

The Board must also furnish clothing for the discharged patient to take the place of that destroyed by the order of the Board.

All this public service is forced upon the patient and no implied contract arises that he shall pay therefor.

(For a collection of the authorities on the powers and duties of Boards of Health, Sec. 92, Am. Decisions, 76.)

As to suggestions for further legislative action, the following is submitted :

1. That the State Board of Health, in its management of county affairs, should address its instructions and advices to the County Health Officer, and all its instructions and advices to municipalities should be communicated through the County

Health Officers to the Municipal Health Officers; and all Municipal Health Officers' business transactions with the State Board must be forwarded through the County Health Officer, except in cases of appeals from the decision or acts of the County Health Officer, in which cases the Municipal Health Officer may communicate directly with the State Board, furnishing the County Health Officer with a copy of his communication.

2. That the statute be amended so as to grant specific powers as to quarantine of infected persons in case of epidemics, under such limitations as will not unreasonably deprive the patient of his constitutional liberty, and yet protect the public health.

3. That the rules of the State Board of Health be reformed and codified so as to specifically indicate in each rule the person responsible for their violation; and the specific act, the commission or omission of which will constitute a violation of the rule; to the end that any information may be predicated upon them, and the power of the criminal law, as the statute contemplates, be used as an efficient means for their enforcements. And that the rule be so extended as to reach the sanitary disposal of filth and offals in and about private residences, yards, wells and crowded tenements.

II. DUTIES OF HEALTH OFFICERS.

The powers of the health officer being known, it may be said that his duties are commensurate with his powers; he should fill the full measure of these powers for the protection of the public health; not officiously, whereby disrespect of lawful and salutary restraint is bred, but in the broad guage spirit of the humanitarian.

In the practical exercise of his duties the health officer will find a wide field for the earnest and conscientious sanitarian, to whom this branch of the subject assigned is the special province.

III. LIABILITIES OF HEALTH OFFICERS.

To the public, whose executive officer he is, the health officer is responsible in a moral and official sense.

In a legal sense he is criminally liable under the statute for failing to promulgate and enforce the rules of the State Board of Health.

Civilly, he is liable for the excess of power, being a trespasser and wrongdoer when he interferes with the rights of property or personal liberty, when not authorized by law.

Again, he is liable for all damages that may result to his enforced wards from his negligence and want of due care.

Thus, where the health officers removed an infected wife and child and placed her in a tent without flies or stove, and into which the wind and rain blew and beat, wetting the bedding and clothing, and the patients died, it was held: "If the defendants caused the removal of the plaintiff's wife and child without the care and precaution which the circumstances required, and if death resulted therefrom, then in our opinion they are responsible; and the fact that they were city officers, and acting under a city ordinance, does not shield them."

64 Texas 316.

DISCUSSION.

Dr. Hibberd. I will say this is an exceedingly important question. A great many of the difficulties in the perfect workings of the State Board of Health have been in the imperfect knowledge of the subordinate health officers themselves. A little while ago we had a case where two or three doctors were associated, and some of them said the case was diphtheria and some of them said it was scarlet fever. The question here is, what are the health officers to do under such circumstances? In my personal experience in matters of this kind much of the difficulty had arisen from the indefiniteness of the rules that have been laid down for the government of subordinate health officers. This paper asks that the rules and regulations prescribing the means pointing out the duties to subordinate officers shall be definite and distinct, and as I have had experience in an attempt to enforce the law, the courts hold that where the thing to be prosecuted is a misdemeanor they will

hold to a strict construction. This paper goes on to ask that in some way the State Board of Health shall make these rules under which the subordinate officers are working distinct and clear. It is true the State Board of Health is handicapped by an insufficient appropriation; they have done as much good as they could, but their opportunities have not been great enough. This paper urges, and others here have urged, that we get together and get a better platform on which to stand to administer the affairs of the State Board of Health. It is for the benefit of the people, and for their benefit only, that we are striving.

Dr. Hanman. We have a class of people going over the country selling what they call proprietary medicine. The question is, is there any way in which we can prevent this? A man claiming to be a physician traveling over the country will hear of persons who are sick. He will go and examine any person who is sick, any kind of sickness, and say that for a certain sum he will give them medicine that will cure them. I heard of one circumstance, and met the gentleman and asked him what school he belonged to or where he had graduated. "Oh," he said, "I didn't graduate, I didn't go to school, I am a natural physician." I spoke to the Prosecuting Attorney and he said, "Oh, he has a contract; you can not reach him." Now, is there any way by which they can be reached? They are as likely to take a case of diphtheria, scarlet fever or typhoid fever as paralysis or urinary troubles.

Dr. Walker. I think we had better get back to the paper. I practice in a little town west of Logansport, in the same county where Dr. Hanman is Secretary, and it was the good pleasure of the council of the town of Wolcott to make me their health officer. I have looked over the sanitary conditions of that little town. It is badly located, and I found myself handicapped, as I thought, by the insufficiency of the authority of the State Board of Health. Now, that paper spoke of the things I came here to find out about. Can I abate a nuisance within three feet of my window, can I abate a vault within ten feet of my well, and when I have the town council against me because they are afraid to interfere with this particular individual, have I any recourse? I believe the paper just read would very readily set up for me the remedy. Now, let us put

ourselves into a shape to bring this to crystallization, so that we can get it into our State laws.

Dr. Hamilton. I would like to ask a question about the rules of the State Board of Health. Could they not be made more definite, more clear, so that they could be handled and become statutory? Doctors know all about the public health, but they are not lawyers. If a law passes through the fine touch of a first-class lawyer, that is all that is necessary.

That very step has been taken. Two very prominent members of the bar here, old members, men who have the reputation of being able to write law that will stand the interpretation of courts, have volunteered to help the health department. They will give their time to it, and I think it is very commendable of them to offer to do this. Their names will be known in time.

Motion made by Dr. Hamilton that this matter be left in the hands of the Secretary of the State Board of Health.

Motion seconded and carried.

Dr. Leech. I have a few questions handed me here. The first is: How can vaccinating a person a few days after exposure prevent small-pox?

It will make it lighter.

Second. What right has any one to send a person to a pest house, who has not small-pox, simply because of exposure to the disease?

I don't think any law is transgressed in sending such a person to the pest house.

DR. PEARSE'S PAPER—DISCUSSION.

[This paper was a report by Dr. Pearse as chairman of a committee "whose duty it shall be to consider the expediency of districting the State for sanitary purposes, and such other matters as will increase the efficiency of the State Board of Health." Dr. Pearse took his report home with him to make corrections, and very soon afterward he died and the paper was lost.]

Dr. Stout. I would like to ask a question or two, and I ask for information. Dr. Hamilton, Dr. Francis and others, who seem to take a great deal of interest in the work, spoke about municipal laws having authority over the laws of the State Board of Health. If a contagious or infectious disease should spring up in a town in some county is it not a fact that the Secretary of the State Board of Health has control and power over the City Council? And has it not also control over the city board of health? Has he not a right to say and suggest

what the others shall do, and they obey? I took charge of our city in December, and at the time we had small-pox there the county health officer and the city health officer did not seem to know whether to appoint physicians or let some man volunteer. My partner and myself took charge of the cases, and after the council met they put us out on account of politics, I suppose, and put another man in. Afterwards I understood that the Secretary of the County Board of Health had a right to say who should control the cases.

Dr. Francis. My understanding is that the power of the County Secretary is paramount in that county, subject only to the authority of the State Board.

Dr. Hibberd. I should think the power of the county health officer could interfere when the municipal officer failed to do his duty. I don't think there is a great deal of difficulty in understanding the relative duties of the two sets of officers in a case like that. The county officer must report to the State Board of Health and the town officer should report to the county officer.

Dr. Walker. I should like to ask the last speaker what applies in the event that the town board fails to adopt the suggestions of the municipal health officer. Where is his remedy when the board fails to take the advice of their created officers, the health officers of the town? Where is his remedy?

Dr. Bence. I understand from Dr. Hurty that the State Board of Health was arranging to codify the rules and regulations. I have a resolution here that I want to read and have adopted by this conference of secretaries, if it is approved, in regard to some of the rules upon which there is the greatest diversity of opinion among the secretaries in the State. I have always tried to enforce the rules so far as I knew. Recently there have been two bodies moved into our county and buried. They died of diphtheria in other counties—one in Marion County, the other from Muncie, which was hauled in a hack and buried there. A few weeks since there was a body disinterred in Terre Haute that had been buried two years, which had died of diphtheria, and was hauled through our county. I protested against this. I was advised by some of our citizens to get an injunction and prohibit them from entering the county. We buried the body as quickly as possible, and then turned the team back and made them leave without stopping. The body that was removed from Terre Haute was removed

with the consent of the State Board of Health and of the Board of Health of Vigo County. The object of this resolution is to define definitely and have a law with regard to this. I wrote to the Secretary of the State Board of Health inquiring about it, and I have a letter from him. I would like to have the sense of the meeting on this matter. I feel that our duty is to the living and not to the dead. I believe that after a body has been interred that has died with one of these diseases, that the living should never run the risk of any exposure from that body. No matter how much you may have disinfected, no matter how much you may have injected, no matter how hermetically it is sealed, to put that on the highway, the law forbids them from going on the railway, but they haul them in a buggy or a hack, and take them through the country. This one was taken 110 miles through the State. I would like to have this body, if it meets their approval, pass that resolution, or one of a similar kind, and refer it to the State Board of Health.

Resolved, That the State Board of Health should adopt and promulgate a rule prohibiting the disinterring of a body dead of yellow fever, small-pox, scarlet fever, diphtheria or membranous croup; also, a rule prohibiting the transportation of a body dead of any of these diseases by any conveyance, either public or private, over any public highway, except for the purpose of reaching the ordinary burial ground of the community in which the death occurred.

Motion seconded by Dr. Stout.

Dr. Hibberd. I think there ought to be some limit. I think it would be well to limit that to a number of years. It should be within five, or three, or two years, when all of the organic and communicable matter would be past all possibility of doing harm.

Dr. Hurty. I do not know that that can be told exactly. I will speak of the instance that Dr. Bence has brought up. A family by the name of Curtis lived in Terre Haute. A child died of diphtheria, and the family, at time of death, went to Dr. Jenkins, Secretary of the Health Board there, and said they wanted to comply with every instruction, because some time they wanted to remove the body. Dr. Jenkins said everything would have to be done under his supervision, so the child was arterially embalmed and then abdominally embalmed, then had the embalming fluid poured down the throat. The body was sealed in a zinc case. It was buried for two years, at the end of which time the Board thought there would

be no danger, and they felt that they were morally bound to allow the child to be removed. The mother, a weak woman, not in good health, had dwelt upon that removal in her mind for a period of two years, and was wrought up about it, and as the time approached when the child would be removed she became very much excited about it. It was thought that if this could not be done we would have an insane woman on our hands that could be saved. Here was a sterile corpse, and hermetically sealed; here was the promise of a board of health, a moral obligation was involved; here was the possible saving of the reason or health of a living person, and according to sanitary science there was not the slightest accident that could happen, not the faintest risk possible was run. Therefore, under these conditions, we granted the permit, or the President of the Board wrote that we would have no objection if the Vigo County Board would review their work and grant it. Had the body been reduced to ashes in a furnace there could be no less danger. What would you do? I say it was the duty of any rational man who might have authority at that time, to grant permission for that removal. I maintain that it was right and that it would have been wrong to do otherwise. That body was sterile. There was not the slightest risk in removing it. If all precautions had not been taken, if the corpse had not been sterilized, if it had not been hermetically sealed, I would say no to a request for removal.

Dr. Stout. I think this ought to be settled once and forever. You talk about taking a step back. I think when we have taken a step of this kind we are taking a step backward. We quarantine our county as good as any county in the State, and we want to continue to do so. The State Board of Health ought to lay down rules and laws that are definite, and if you are going to permit this thing to be done you are simply destroying our power and taking away one of the props which enabled us to enforce the laws we have. I say that a precedent has been established that will return to plague us. It has already begun to plague me. I don't question your ability to sterilize a body, or Dr. Jenkins' ability, but we have undertakers all over the country, and we have tinnerns all over this country that are not competent to hermetically seal a case.

Dr. Ferguson. I want to say I am heartily in favor of the doctor's motion. We will not allow the burying of such bodies

in our county. We allowed this special case, but I believe it was wrong. I think there was dereliction in your county in allowing it to be brought in.

Dr. Stout. The first child was brought to Roachedale without my consent or knowledge. I knew nothing of it. The other child I knew nothing of until they came down to dig the grave, and the child was already on the way. The best thing I knew of then was to bury it, and I took all the precautions necessary. If my permission to bring it there had been asked I should have refused it. If a body is to be disinterred permission must be obtained from the State Board of Health, the County Board and the Local Board.

Dr. Ferguson. Here we have a condemned cemetery in our city. There have been no burials there for twenty years. That ground is vacated. What would you do? There was no record kept of death in the early days of the city. What would you do in taking these bodies out? I have no power to forbid the disinterring of any of these bodies. I think your resolution is good if you can cover that. I think with you, it is absurd to have a rule forbidding the transportation of persons dying of contagious diseases on the railroads and allowing them to be taken through the country.

Dr. Hurty. The State Board of Health granted no permit. We told the Vigo County Board that we would not object if they had taken all these precautions; we told them they might use their own judgment.

Dr. Bence. I wish to amend this resolution by placing the limit at which a body could be disinterred at five years for diphtheria, ten years each for small-pox, yellow fever and scarlet fever, and five years for membranous croup.

It was moved that the resolution as amended be adopted.

Conference adjourned until Wednesday morning, May 13.

Conference called to order at 9:30, with Dr. Hibbard presiding.

Dr. Davis. I understand that Dr. Francis, who is chairman of the committee in reference to future legislation, in traveling over the State, comes in contact with various legislators, and being interested in this matter he will attempt to interest them personally. I move that the committee be continued, to act in

conjunction with the State Board of Health in the preparation of a new statute, and that Dr. Francis select such other members of the committee to assist him as he sees fit.

Motion seconded and carried.

Dr. Davis. It is desirable that the present law be changed, that it be enlarged. We want to keep up with the procession. I want to emphasize the fact that so far as the practical, everyday working of health officers is concerned we have a great deal of power, and I wish my paper here to be placed on file.

A BASKET OF CHIPS.

DR. DAVIS, RICHMOND.

To condense what one may say on a given topic often detracts from the value of the communication. The limited time given at meetings of this character, however, precludes any but an outline statement. From the earliest ages it has been recognized that the vitality and perpetuity of a nation largely depended upon the execution of its health laws, and as the light of the centuries increased, it has become more and more apparent that what was formerly a fancy has by statistics been demonstrated to be a fact. So far as sanitation in America is concerned, when the Union of States was formed and articles of federation signed, the several States surrendered certain rights, since which said rights have belonged to the Federal Government exclusively, namely, such powers as would enable the government to defend the nation from aggression and prevent national disaster of any character. The several States, however, reserved to themselves the right to regulate its police power as each State might ordain, and the police power of the State is absolute and only limited by the supreme law of the land, which is that the private rights of no citizen of the United States shall be invaded, except as hereinafter defined. The State thus having the undisputed power to regulate everything pertaining to the public welfare within its borders, may delegate that power to corporations, cities, towns, villages, which

in turn may enact such rules and regulations, not inconsistent with their charter, as will best subserve their individual interests and promote the general welfare. This delegated police power, however, under which Boards of Health operate, must appear in the form of ordinances or rules and regulations, and these in turn must be reasonable, and their requirements not in excess of their delegated power. These requirements are binding, not only upon residents of the locality where they are in force, but equally so upon all who come within its limits. All ordinances and all rules and regulations to become effective require legal publication or publicity. Many a case of prosecution has failed because of this omission. If any ordinance, or any clause thereof, be too comprehensive, or exceeds the power delegated to the corporation enacting it, such particular clause is void; but the ordinance as a whole is not thereby vitiated, if the subject matter be separable. State Boards of Health are created by the Legislature; local Boards are appointed by corporations. The function of a State Board is chiefly advisory; local Boards, executive. State Boards are empowered to formulate proper rules and regulations which, when promulgated, have the force of law. Local Boards are subject to these rules and regulations; but may enlarge upon and make them especially applicable to particular localities where said local Board may exist. All rules and regulations, whether in the form of ordinances, passed by city or town Councils, or special rules of the Board of Health, to be effective require publication. The element of notice is vital. County Boards of Health may not invade towns or cities, where a Town or City Board exists, except upon failure of said Town or City Board to perform their functions, of which the County Board shall be the judge. In such event the County Board may exercise the right to report such failure to the State Board, meanwhile themselves perform such duties as may be required by the exigencies of the case. Ample power is conferred by the Statute to enable local Boards to accomplish the purpose of their creation, and in cases of litigation a very liberal construction is placed upon the varied laws relating to health as the purpose is the welfare of the public. Local Boards may employ all necessary aid to enforce their regulations. In County Boards, the Sheriff is appealed to; in cities and towns a police officer or a Justice of the Peace. Local Boards are required to report all

proceedings, to instruct health officers, to appoint necessary assistants, to isolate all cases of contagious diseases dangerous to the public health, to regulate quarantine, to restrain ravages of epidemics at whatever costs, and as far as practicable cause an avoidance of preventable disease, to provide pure vaccine virus for all requiring it, and not otherwise provided for, to keep a record of births, deaths and diseases, and see that such reports finally reach the State Board of Health. In case of contagious disease, where no other provision is made, physicians may be appointed, nurses secured, and the county, township or city is liable, as the case may be; provided there is inability on the part of the patient to bear necessary expenses. Boards of Health in cities and towns had better act under the ordinances of their respective town or city; but where none such are in existence, they are empowered to frame and publish such rules as will best subserve the public welfare. Without a penalty all rules and ordinances are inoperative, and no penalty is legal that exceeds the limit prescribed by statute. Special orders to abate nuisances must be served upon parties interested in writing. The entire police power of the State is behind the lawful action of the Board of Health to enforce its demands. In case property is necessarily destroyed, in order to prevent the spread of disease dangerous to the public health, and it is done purely in the interests of the public, parties injured are not entitled to compensation. Physicians may be compelled to issue and leave with Boards of Health reports of births and deaths, even though not compensated. The State may lawfully impose upon the private rights such reasonable burdens and restraints as may be necessary to secure the general health and safety. Private rights are subordinate to public interests. All ordinances, rules and regulations must be general in their application. Evidence of class-legislation vitiates the particular rule. Boards of Health have the power to abate a nuisance that is a menace to the public health. Nuisances are of a public, private and mixed character. A public nuisance is an unlawful act, which causes inconvenience or damage to the public, in the exercise of rights common to all citizens. A private nuisance is one by which the rights of individuals only are injuriously affected. Such a wrong constitutes a trespass for which the remedy is by civil action at law, as in other cases of private injury. A

mixed nuisance partakes somewhat of the character of either of the above, and frequently taxes the judgment of a health officer to properly differentiate. As a key to the situation, I may refer to the sanitary definition of a nuisance, which in general terms may be thus expressed: "Those acts or omissions which are injurious to the public health." Municipalities are not necessarily liable for wrongful acts committed by its Board of Health; but Boards of Health are personally liable when proceeding in excess of their authority, when they invade private rights. A Board of Health is also responsible for gross negligence in the performance of duty, resulting in injury to persons or property; but not liable for simple neglect to perform duty.

These propositions are subject to provisos and modification, but as simple propositions are substantially correct.

"WHAT INDIANAPOLIS IS DOING IN SANITARY MATTERS."

BY DR. FERGUSON.

It is not my purpose to say anything about the theory of sanitary science. It is presumed that the gentlemen here are as familiar with that subject as any one can be. I simply wish to make a plain statement of the method by which a city of the size of Indianapolis attempts to combat diseases and abate nuisances. The Board of Health of the city of Indianapolis acts under a charter which gives the Board and the city very large powers. The Board of Health is appointed by the Mayor of the city. The executive officer of the Board is termed the City Sanitarian and is Secretary. Under the law he is compelled also to be the chemist and bacteriologist. The work is very excessive when thrown upon the shoulders of one man; so much so that I think we will have no trouble when the council next meets to have an appropriation to get another assistant. We have in this city and suburbs 150,000 people, and among that number are 20,000 school children. The chil-

dren attend some sixty schools, forty public and the rest private and parochial. When you think of the vast number of children that daily congregate in these schools, that we do not have more epidemics is to be wondered. Last year was a remarkable year in Indianapolis for the great number of cases of diphtheria. We had as high as 127 cases a month in December and November. We have lost from diphtheria alone in one year very nearly one hundred people. The bacteriological laboratory was opened on the first of December. At that time there was no system of reporting those cases except the one well-known to you. The physician would send in a blank furnished by the State, stating that diphtheria was in a certain place. The rules required that the house be carded for twenty-one days. At the end of that time the card was taken down. Now, here was the trouble with that rule. In many instances the parents allowed the other children to go to school, and the teacher was not aware of it unless told by some neighbor, or some other child explained the absence of the child. The first thing the Board did was to adopt a card like this: (Showing card and reading it). Now, the object in having it signed by the health department is this: We found we could not depend upon the physician. The physician would give the certificate to go to school too soon. He would also give permission to the other children of the family to go to school because they were taken to a neighbor's house. We know from our knowledge of sanitary matters that when a child has been exposed to this disease that the fact that you take it from home is not going to prevent the development of this disease. The teachers were glad of this. They had sent children home on the statement of neighbors and got into trouble from it. Now, they can show this certificate, and when the parent comes to us we can explain to them the rule and they generally go away perfectly satisfied. In every case of contagious disease that is reported, a sanitary inspector is sent to the house with a blank of this kind: (Showing blank and reading it). "Where has the patient been in the last thirty days?" is one of the most important parts. This should show where his place of business is, if he takes his meals at a restaurant or at a boarding house. "What school does the child attend?" Where it is ascertained that a neighbor has visited a house where there is diphtheria,

we also keep the children of that house away from school, and we sometimes have a warm time in the Board of Health about this.

At the same time that we adopted this system of notifying principals of schools, we also adopted the method of distributing culture tubes through the city. The physicians have been notified at what depots these tubes can be obtained. (Dr. Ferguson exhibited the tube to the physicians present.) Within twelve hours we are able to give a positive diagnosis in most cases, and this the laymen and patients are beginning to appreciate. For some time it was difficult to get a physician to do this. He felt that if he felt any doubt when he went into a patient's room, he might lose his prestige with that family. People are beginning to learn that the Board of Health will determine whether it is diphtheria or not in a short time, and if not diphtheria the quarantine will be raised. Physicians are now educating the people so that they don't feel embarrassed in telling them that it is impossible in some cases of diphtheria for the physician to tell within twenty-four hours as to whether the membrane of the throat is diphtheretic or not.

A school teacher in this city within the last two months (a teacher in the high school) visited one of her pupils who was absent that afternoon. The physician came in an hour after and pronounced it a case of malignant diphtheria, and the patient died the next day. The family notified me that the teacher had been there, and I notified her to keep out of the school. The teacher came to me and said she was poor, was here under expense, and brought all the stress that a good-looking young woman can bring on a soft-hearted doctor. I told her she would have to stay out of school three weeks. At the end of eight days she had a well defined case of diphtheria. Under careful treatment she recovered, and at the end of eight days more her physician came to me and asked that she be allowed to go back to school, but I told him she could not do so. She came to me and went through the same appeal as before. I told her I would make a culture of her throat from day to day, and when there was no evidence of the disease she could go back to school. I found evidence of it, and at the end of a week still found it. She did not get back to school until four weeks after the card was put on the house, although the ordi-

nary rule is three. That shows it is impossible to tell when you may permit a child to go to school after it has recovered from the disease.

Dr. Taylor, of this city, reported a case to me fourteen days ago. He came to me yesterday and said he would like to have that child go to school. I told him it was too soon. He said he thought the child was entirely well, but I made a culture, and this morning, on examination, I found a luxuriant growth of diphtheria; and yet that child is well, and if it went to school would probably infect other children, for they drink out of the same tin cup and will exchange pencils. I have no doubt that many of the diseases we have in school are transmitted in this way by children who are apparently well carrying the germs in their mouths.

When the sanitary officers go to houses to put up the cards, they take with them a letter of instructions to the family. It is a simple statement of the nature of the contagious disease, the danger of infection, the best method of preserving the rest of the family, and telling them how to properly disinfect. If they are not prepared to do it we do it, and in almost every case it is left to the department. We do this whenever the culture shows that there is no more diphtheria in that family. In scarlet fever we always do the disinfecting.

In tabulating the returns, I have a list of all the schools, public and private. I keep a check on the schools. When in any school I see that there is an excessive number of these cases, I immediately investigate that school to see what is the matter, and, if necessary, close the school, or room, and keep the children out until the room has been thoroughly disinfected. In relation to funerals. We found that funerals were being conducted against the law. If the child was a Sunday-school child, it had its class for pall bearers, and in some neighborhoods all the neighbors came in, and some of them brought their children. We prepared a circular for undertakers, clergymen and others who are required to take part in funerals. (Dr. Ferguson read circular.) We require them to be buried within twelve hours, because that is what the State Board of Health requires. It was the custom, when a child died, to take the body in a hack. The coffin was taken in a hack, and in many cases the coffin was cheap and not properly made, and the public hacks were used by other people. We now send an in-

spector to each funeral, and the undertaker is obliged to notify us when the funeral is to be held. The inspector is in plain clothes, so no offense is given. In one case they said they could not afford a hearse, but the inspector stopped the funeral and compelled them to get a hearse. We say, if a family can not afford a hearse, the city will pay for it. In disinfecting we use bichloride of mercury for the clothes. With sulphur we use steam, as without it, it is of no use whatever. The State Board of Health some time ago made it a rule that reports should be sent in, but, unfortunately, they sent out a lot of blank returns which stated on the back that only malignant typhoid fever should be reported, and I have never seen a physician who had a case of malignant typhoid fever. We prepared a circular two months ago which we sent to every physician in the city, urging upon them the necessity of reporting these cases of fever, and found out that last year Indianapolis had 127 death from typhoid fever, and that is a disgrace to the city in these times. We know if we can trace a cause of typhoid fever to its source, we can reduce the death rate. It has been done in other cities. The physicians are promptly responding, and in one month I found we had forty one cases, when I did not suppose we had more than one or two. On this blank we get a complete description. When the sanitary officer goes to the house, he takes a sterilized bottle holding a quart, and gets a sample of the water used there, gets the name of the dairyman, the place where the patient has been within the last thirty days. We have the dairymen registered, and we go to the place and investigate, get a sample of the water, and find out whether there has been any typhoid fever in the neighborhood. An investigation in this city revealed the fact that sixteen cases out of this number were drinking city water, and eight of these cases were taking milk from a creamery which used city water to wash its cans. Of the remaining, five went to public schools that used the public water supply, and the remainder were in business houses that used the public water supply. That led me, of course, to suspect the water supply, and I immediately made chemical and bacteriological tests of the water. Chemically, I found it was pure, but bacteriologically I found it was infected with colon bacteria. Now, while I do not say that this epidemic comes from this water, I felt that it was necessary to warn the people of this,

and have warned them to boil the water. Now, on the other hand, people will say, "What shall we drink?" I have examined, since the first of January, four hundred samples of water from wells, and out of that number seventy-five per cent. have been condemned as perfectly unfit for use. The only thing that we can do now is to insist upon the Water Company putting in a suitable filtering plant. This has been done in Europe and in Lawrence, Mass., in this country. This will exclude most, if not all, of this bacteria.

The question of dairy infection has become one of the most important in the province of the health officers and of health boards in general. It has been the experience of those competent to judge that a large number of the cattle of the country are suffering from tuberculosis. It has been demonstrated that this infection is carried in the milk. It has been demonstrated in other cases that typhoid epidemic has been carried in the milk. Last year the health board prepared an ordinance based on the ordinance of other cities putting the dairies that enter the city under strict rules. We have now registered since January 1, 1915, and we have analyzed the water from some four hundred wells, and out of that number, as I told you, 75 per cent. are bad. Many of these wells are in the sheds where the cows stand, open wells sometimes, and the amount of impurities in these wells is great. In many fecal bacteria abound, and if after a proper time they do not abate that nuisance and put in a proper water supply, that dairy will be excluded from the city, and if they attempt to sell milk, will be arrested and fined. The authorities stand by us in this. The Police Judge has always stood by us. We have an inspector to look after this, and we have condemned a number of cows since January 1.

(Dr. Ferguson read blanks to delegates.)

There are in this neighborhood among the Jersey cattle undoubtedly a number of cases suffering from tuberculosis. A great deal of sport has been made by dairymen and by some health officers of the rules that have been formulated by the State Board of Health and by the City Board of Health. Now they have not a single rule that has not been adopted by creameries in Illinois, New York, Pennsylvania and some other States. The creamery man knows the danger of infection from bacteria, which have no business in the milk. He knows it spoils the taste of his butter, and so takes all these precautions,

and we thought that in adopting these rules for the preservation of health that we were not going too far when we adopted the same rules that simple tradesmen did for the protection of their goods. You must, in formulating any rule, have an ideal. We have a standard to which we can bring these men by law in case they refuse to obey the spirit of it, at any rate. The Board of Health in the city finds itself handicapped on account of the lack of efficient State laws. There are a great many things we would like to do. The jurisdiction of the city extends only a short distance, and these dairymen who send milk into the city send it from the adjoining counties, some of them sending it as far as sixty miles. Of course it is almost impossible for us to keep a strict sanitary survey of these places. We visited them once, and found the conditions much better than in our retailers' places in this city. This milk is sold to creameries here, and they insist upon a certain standard. For that reason we find that those dairies that send milk into the city to those creameries are much better than the dairies near here that bring their milk into the city and sell it to consumers. What we want is a uniform rule, so that not only this city, but every other city, can undertake the inspection of dairies, and if we can prosecute in this county the State can in another.

Dr. ———. Where do you get those tubes?

Park, Davis & Co. prepare them. They are very difficult to prepare. You can get them in boxes of fifty for \$2.50, expressage paid, for the purpose of settling cases of diphtheria.

Dr. Ferguson then showed the physicians present how to get the culture and how to tell whether the tubes were in good condition and fresh.

Dr. Leech. Have you ever noticed how people handle milk tickets? I have seen filthy tickets put into the basin where the milk was to be put. I have seen children put the tickets into their mouths.

Dr. Ferguson. In houses where there is diphtheria we do not allow the dairyman to leave bottles, but to empty the milk into a vessel furnished by the people in the house.

Dr. Brayton. I am in full sympathy with the ends that this body of representative, educated, intelligent health officers have in view. Dr. Hurty and Dr. Ferguson have for years been friends of mine, and I can not tell you with what joy I

see these new notions and views being accepted by men whom you would think were settled in their ways and whom nothing could turn out of the ruts of the old pathologist. But here we have a body of men gathered from all over Indiana, receptive, pliant. Of course you will make blunders. Dr. Hurty has made blunders since I knew him, and Dr. Ferguson is capable of making blunders. We all are; but how can we solve these things better than we are doing now? I hope I may be able to help bring these things before you through the *Journal*. I had an article in the April number on "The Function of Health Boards," and I hope I may get reports and aid from each of you, so that the rapidly increasing functions of health boards may receive that attention in the *Journal* that they are worthy of. (Dr. Brayton read the article spoken of from the April number of the *Indiana Medical Journal*, of which he is editor.) We have great hope for the work Dr. Ferguson and Dr. Hurty are doing in this city. Dr. Ferguson believes that our water is contaminated with fecal impurities. The little statement he made last night in the *News* made me resolve to boil water for a family of ten. Dr. Hurty has done much in getting people to use city water rather than the well water of the city, and if that company, that commercial company, does not look to it, they will find him after them.

STATE SUPERVISION OF THE PUBLIC HEALTH.

PROFESSOR BURRAGE.

The advance in our knowledge of bacteriology has greatly influenced our modern theories of disease. We notice that many diseases are prevented that are caused by something that we can actually grasp, by some peculiar condition of environment that can be improved, or perhaps done away with altogether. Since we have discovered the scientific reasons for some of these hygienic conditions there have been many laws enacted, many regulations passed that tend to prevent the

spread of disease. The good effect of such law when properly enforced has been everywhere felt. In civilized countries in the last ten years there has been a decided decrease in the deaths from infectious diseases largely due to enactment of sanitary regulations. In previous times the tendency has been to deal with individuals rather than with communities. That is, we have been spending our energies on curative medicine rather than on preventive medicine. In short, it is necessary to find the cause and hence the prevention; that is, to prevent these causes and the conditions in the future. Preventive medicine, then, is the great protector of the public health. Certain phases of this preventive medicine, then, come very properly under the charge of the National Government. Good examples of this phase of the subject are the national quarantine laws and the inspection of imported rags suspected of infection. Other phases will come naturally under the supervision of the city or town. These are the quarantining of infected houses, the inspection of milk, etc. Some other cases can be supervised by neither the city nor the National Government and will come under the supervision of the State.

When a town is in its early stages of development the houses are not close to one another, but as the population increases the dwellings come nearer and nearer to each other, and we find that unless the systems of drainage and water supply are exceptionally good the health of the population is not up to its earlier standard. Looking at a State in the same way we see at first towns here and there, but not near enough to each other to affect in any way their sanitary conditions. Later we see the towns increasing in size and number. Some have introduced public water supplies, others systems of sewage disposal, and others both. But if we take a careful survey of the situation, we find the body of water that is being used as a source of supply by a certain town has at some other locality received the sewage from another town. If this happens to be a river and the sewage is thrown into it from a town above, it is obvious that serious results might follow.

This brings us to the pollution of the streams, the protection of the public water supply. This question of the pollution of streams may be looked at in two ways. A stream may be polluted in such a way as to make it a public nuisance. This often occurs in manufacturing streams, and while this may not be

directly responsible for disease it may be unsightly and give offensive odors. I had occasion to examine a manufacturing stream in Massachusetts on which there were several mills and manufacturing establishments. The State Board of Health was called on to investigate it and to find out what could be done to protect the towns that were suffering from this nuisance. I went out with one of the engineers, and we found that river in an exceedingly offensive condition. The water was nearly black, the fish in the stream had all died and were collected along the shores, the vegetation in the river was showing the effects of the pollution, and, in fact, the whole surroundings were extremely offensive and unsightly. In making a bacteriological examination of the water we could not say that it was dangerous in any way; that is, as regards the sanitary condition of the water. Here was a river practically a sewer, although the contents were not sewage exactly, but the river was creating a nuisance in every sense of the word, and it was in a very bad condition. We went to the woolen mill causing the trouble, and they were using dye stuffs and other chemicals, and they claimed they were not putting anything of an offensive nature into the river. We took samples above where they were situated, and took samples below, and a mere observation of the two samples was sufficient to show that the manufacturing establishment was the cause of the nuisance. They claimed that it was a powder-mill that was situated about a hundred feet below them on the same river, but we got this dirty water directly below their establishment. We found, however, that the State Board of Health had no direct power to remedy this evil. That is, they could not forbid their putting those things into the stream because they had certain rights on that river which were given to them at an early date by the State Legislature. I merely state that as an instance of the pollution of streams as a public nuisance, but not as a particular danger to public health. The other way in which a stream may become polluted is by receiving the sewage or refuse from above. It is established, as you all know, that certain diseases are carried through the agency of a water supply, and as many streams serve as sources of water supply, this is, very obviously, a serious question. In other words, towns should be in some way protected from being obliged to

drink water which has received refuse from another town. It seems to me this is very properly a question to come before the State authorities.

I would like to speak here of the Merrimac River. We had there a series of epidemics. The Merrimac River receives the sewage from several large manufacturing towns and cities. All of these towns throw their refuse and sewage into the Merrimac. Now, an epidemic of typhoid fever broke out in Lowell. The State Board of Health had made arrangements previously to receive reports on blanks stating the number of cases per week of typhoid fever in Lowell and Lawrence. All at once it was noticed that the number of cases jumped up remarkably. They immediately caused an investigation to be made, had blanks sent out to be filled out what water supply those cases having typhoid fever had had access to. At the same time the towns below Lowell—Lawrence, Haverhill and Newburyport—were notified that typhoid fever was prevalent in Lowell and might be expected to break out in their towns, especially Lawrence, some ten miles below on the same river. Now, both these towns, while their water supply is largely made up of well water, at the same time have these canals for mill purposes running through the town, and many of the mills have tanks in the mill establishments which are provided with water from the canals. It was found upon investigation that nearly every case of typhoid fever that occurred here had had access to this canal water, not the city well water. As was predicted, typhoid fever did break out in Lawrence some two weeks later. A very surprising fact was that typhoid fever broke out in Newburyport two weeks later still. This caused a great deal of comment from the fact that Newburyport was supposed to get its water supply from wells driven near the river. When it was announced that the typhoid had broken out in Newburyport they could not understand it. They went there and investigated and found that for two or three weeks the superintendent of the waterworks said he had been forced, on account of the low water in the well, to get the people's water from the river. That explained the fact that typhoid fever had worked its way down to Newburyport, which was supposed to have a water supply above suspicion. If the people had been notified of it they might have been able to prevent the disease appearing in the town.

I would say in corroboration of what Dr. Ferguson said, that we never have been able to find the germ of typhoid fever in water unless we ourselves have put it there and took it out immediately after. It is very difficult to find this in even the suspected supply. We found the colon bacillus often in these waters, and that is sufficient to condemn the water supply. Another experiment that has been carried on by Massachusetts is the sand filtration of water. At Lawrence the State Board of Health established a large experiment station, for the purpose of investigating the filtering powers of certain sewers, and to see whether the filtration of sewage could be carried on on a large scale so that the inland towns could throw the effluent from their sewers into the streams and to let the land take care of the sewage, not to throw the raw sewage into the body of water to carry disease and death to the towns below. As the result of the work at this experiment station several sewage disposal works have been introduced and have been working with great success. They are able to work over the sewage to such an extent that a comparatively odorless and harmless effluent can be thrown into the river or lake and carried away in that form. The ground takes care of the sewage. The first time I ever went into this experiment station I went with the professor with whom I was studying. The tanks were at the outside in the open air, and there was a sort of ditch dug along inside in which the effluent taps were and from which the chemists took their samples. We saw the raw sewage going into the tanks and the clear effluent coming out of the tanks below, and the professor drank a glass of this effluent, and then passed it around, and it was as pure as spring water. Of course we would not have done that if we had not seen the chemical analysis of that tank.

Another report of work in connection with the State Board of Health has been in Massachusetts in making an analysis of all of the important water supplies in the State. All of them have samples of water sent to the State laboratories once a month, or once in two weeks, for a complete chemical analysis of them, and in this way the condition of the water supplies are known from year to year, from month to month and from longer periods of time. The effect of an increase in population is noticed, and the effect of introduction of sewage or another water supply through the town, and so on. All of these questions

naturally come under the work of the State Board of Health. I dwell upon this for two reasons. First, because it is a subject that needs attention in this State, and second, because most of you are medical men and are looking at the work of the State Board of Health from a medical point of view. If the blood of a body is good the health of the body is good: if the water supply of a community is good the health of the community will be good, as a rule.

Another very important question is that of the relation of disease in the lower animals to those in the human subject. The importance of this has only been recently realized, and several of the States have established cattle commissions and boards of agriculture to look into the various diseases of cattle and swine and their relation to the health of the human family. Especially in relation to the tuberculosis question this is very important. In Massachusetts the Cattle Commission has had a great deal of work to do, and it was up-hill work because the farmers had not been educated up to the fact that the tuberculean test was a good thing. In some places they tried to have the work stopped altogether. New York has already done a great deal of work in that line. Drugs, food supply, milk supply and dairies would naturally come under the State Board of Health rules at first, and they should have subsidiary rules under the city and town authorities. I don't know that it is necessary for me to go into a long list of the things that would be necessary for the State to enact in order to protect the public health. I wish to dwell on the topics that I think you have not been as familiar with as we are in the East; that is, the water supply and sewage disposal. I have intended to have you all look back at the cases of disease and the epidemics which so often lie in the water supply or the improper disposal of sewage, or in impure food. We are trying to educate the people all over the country to-day. In this State we have been even into the grammar and high schools and have given talks on these matters, and it is hoped that when the next Legislature convenes Indiana will be able to step into the front rank with those States and countries that are spending time and money to protect the health of their citizens.

Dr. ———. How is it established that typhoid fever is traced to milk?

In Springfield, Mass., a large number of cases were traced to

milk, and the town did not feel themselves competent to undertake the problem. No theory seemed to fit the case at all, and they sent to the State Board of Health, and they sent a commission up there, and they found, by making a house to house investigation, that almost every case out of the sixty in the city took their milk of one man. They went to this man and asked him where he got his milk, and he said he got it on a certain farm. They found the conditions at the farm perfect as far as sanitary conditions were concerned, and they could not find any fault with that farm at all. Upon further investigation they found out that the dairyman also got milk from another farm, and they went there and found they had had a case of typhoid fever there some three weeks before. One of the farm hands there had had typhoid fever, and the conditions there were exceedingly unfavorable sanitarily. The milk there was lowered in large cans into a well, which was exceedingly filthy, for cooling purposes, and the covers of the cans were not perfectly tight. When the milk cans were submerged the water had access to the milk. We hauled up one of the cans and found that the water was leaking in, and the man, of course, said it was an accident, but none of the cans when they were lowered were quite full. There it was found that the man who had typhoid had walked around the well. The surface about the well was muddy and dirty, and the refuse from the sick-room was taken into the garden a few feet away from the well and thrown there. The milk from that farm was mixed with the milk from the other farm, and thus carried to all the customers.

Dr. Hanman. Our County Commissioners are talking about something having to be done about the privy vaults in the Court House. These are dry vaults. The odor is beyond description, and upon the action of the Sheriff, the town health officers and myself they were closed, and now the Commissioners are considering the problem of using water for this purpose. They had a sewer constructed for the purpose of carrying the water away to the river, and now they are considering the matter of whether it could be disposed of in this way or whether it would be injurious to carry it into the river.

Dr. Ward. Is the city water here in any way filthy? Is it taken right out of White River, or is it filtered? I have under-

stood that you have a large well from which water is taken. We have had that matter under advisement in our county, Miami County.

Dr. Hurty. To the west of Indianapolis runs White River and on the northern border runs Fall Creek. Where Fall Creek enters White River there is an open gallery dug down to the water-bearing gravel, forty feet deep and 125 feet across the top, walled with stone below the water surface and above it three or four feet. The gallery receives the ground seepage. That water, I have reason to believe, is good. It is roughly estimated that about three million gallons a day seeps into the gallery. A second gallery is forty feet from each bank and is covered. At the upper end of this covered gallery there is a trench dug into the river, down to the bottom level of the gallery, and it was covered over, after walling up on both sides with stone. The covering is oak pieces put close together, then sand and gravel on these until about three feet deep. Over this runs the river, and through it water filters into the gallery. Several deep flowing wells bored in the bottom of the gallery furnish a great deal of excellent water. Our public supply then is from three sources—the river, ground seepage and deep wells. It is claimed by the water company that the river water is not permitted to enter the gallery except in case of fire. It is calculated roughly that one-third of the water comes from the river.

Convention adjourned until 1:30 P. M.

WEDNESDAY AFTERNOON, May 13.

Dr. R. W. Martin. The disposition of sewage in small towns where there are no large streams into which it could be emptied is quite a problem. Our town is situated near two small streams. We have one main sewer running into the small stream quite a distance below the town, but the water is not sufficient to purify itself. We have also another sewer that is partly closed, opening into a riprap. Now the parties living along this complain of the gases, and it is undoubtedly an offensive institution. The parties who are connected with this sewer do not want to give it up, but the people who live along the riprap do not want the gases or the smells. The warfare

has now waged so hotly that the Town Board is at the point of the bayonet. Now the point I want to get instructed on is this: What can we do to relieve that condition of affairs? Shall we close the sewer or empty it into the creek? Now, what shall we do?

Dr. Walker. I have a case fitting that, almost from heel to toe, at home. We have no place at all for the waste, either wet or dry. Last season we had an epidemic of what I would call contagious malarial fever. It cost no less than one thousand dollars in doctor bills and lost time, as well as two deaths. I am especially pleased to lay this before Dr. Hurty, believing there are others in the same condition. We are in a very flat country. There have been a few tile put in here and there, and running alongside the town, by the railroad, is a ditch not more than five feet deep. Into that we have our outlet in times of freshets and wet seasons. Last year we had a well at the hotel contaminated, and I pointed out to them the danger of that waste from the hotel and a pig-sty and privy near. I studied the rules set forth by the State Board of Health, and had our town attorney look the matter over, and he said the laws were inadequate and we could do nothing with them.

Dr. Hibberd. We can refer you to the management of Pullman, up near Chicago.

Dr. Hurty. Did you not hear Professor Burrage this morning tell us of the disposal of sewage? How it could be pumped through large tanks filled with sand, or allowed to flow upon sand beds, if the lay of the ground permitted, and the effluent is pure water fit to drink. Now, in your town you are running it into a small stream. You need not abandon your sewer system at all, but ought to abandon the running of sewage into that stream. You can without much expense establish the filtration of sewage. How are you going to do that? The way is to send for a sanitary engineer and have him attend to it. There are a few of them in this State who would put it up at a minimum of expense, and tell you how to take care of it and look after it. These filters, if attended to, will settle the whole question.

In your case, Dr. Walker, you have low land and no fall at all. You have no public sewers from the streets and have the vault system, which is pure barbarism.

Dr. Walker. We have a population of 800. Three years ago it was perhaps 350. It is in a rich agricultural country and growing rapidly.

Dr. Hurty. But you have plenty of soil and ground, and you are pumping the water out of the same ground that you are pumping your filth into. That is worse than barbarism. You will have to keep on educating that community. You can not build a system of sewers, but you ought to abolish right away every one of your vaults, then adopt the drawer system, and attend to it properly. You might as well say that the housewife must abandon her milk cans simply because she does not take care of them, as to say abandon the drawer system because you do not attend to it. Now if you have the drawer system (but for heaven's sake don't adopt it if you do not attend to it properly), if there is not decency enough in the town to do it in the clean and proper way it is better not to do it at all. That system is perfectly practical, and its success simply depends upon cleanliness. Drawer privies must be watched closely, the health authorities must order their frequent emptying, fresh earth must be abundantly supplied, and you can in a small place get over that difficulty in that way.

Prof. Burrage. The effluent that came out of the sewage was pure, but you would not want to use it for drinking water. It tasted very soft, and would not make agreeable drinking water, but aside from that it is perfectly proper to have it flow into this small stream.

Dr. Walker. I want to thank you for what you have said; you have strengthened my hands. Now will you not let a note follow that embodying what you have said?

Dr. Ward. I am very thankful for what Dr. Hurty has said, and I hope it will do our Town Board good.

Dr. Lytle. I will ask if the town, county or State will pay for the property destroyed from being infected with infectious diseases from the effects of the quarantine? In many cases I have had them in my jurisdiction where I had to destroy a lot of carpets and curtains and other things about the house, such as lounges and mattresses of very poor people, who were not able to lose them, and at the same time the property was not worth much; it would not sell for anything on the streets.

Only two weeks ago I had to destroy a lot of that kind of property and left the family sleeping on the floor.

Dr. Kelly. I move you that persons who have goods damaged by the quarantine be paid for the goods by the State of Indiana, and that people quarantined be paid for loss of time.

Dr. Griffiths. I move to amend by adding: "Where it works financial loss or distress which the party quarantined is unable to bear." The Treasurer of our county has recently had a case of scarlatina in his family. The little girl recovered from it, but during all that time she was isolated and the father had no communication with that room, and it being necessary for him to be in his office every day I gave him permission to go to the office, provided he kept himself away from any contact with the source of disease so as to avoid carrying it anywhere. He did so, and the little girl recovered and no other case has arisen. Now, in cases like that it has been no material disadvantage to him except the payment of his physician. In this case I should say he should not receive any payment. I have another case. There was a widow who ran a boarding-house, had a few boarders, and the attending physician was very delicate about putting up a flag, and put it in a place where it could hardly be seen. I went up there and put the flag up right in front of the house. It engendered a great deal of hostility. There were one or two persons who were working daily in the harness factory there, and I told them they must either go through the necessary change of apparel and keep isolated or find another boarding place. Rather than be at this trouble they left the house. The result was that for the time being, about three weeks, the lady was deprived of her boarders. Now, in a case like that I should be in favor of a compensation or remuneration because her daily bread was taken from her. I wrote her a letter from my apparent anxiety to enforce the law, and told her that I was only doing that because I was compelled to, not to show my authority, not to harm her in any way, but for the public good. Now, in a case like that I should be strongly in favor of remuneration.

Dr. Nolen. Does this include damages in the way of property?

Yes.

Dr. Hurty. There is now no law providing payment for destroying goods on account of contagion, except the United

States law that no one shall be deprived of their property for the public benefit without compensation. In order to have a basis to go upon you would have to have a statute; but in common justice, it seems to me that poor people should be compensated for the destruction of their property. In our City Hospital, and all city hospitals, it is especially arranged that those who are so poor that they can not pay shall be cared for without charge. Persons wanting to go to the hospital who are amply able to pay, pay the cost and go there if the Superintendent says he has room for them. But the city will not take them if they are able to care for themselves. This is determined by the inquiries of the officers. Now that is right. If you are compelled to destroy clothing, furniture, etc., because it is infected, and the person is amply able to pay for it, they do not deserve compensation, because it is as much for their protection as for any one else. But if, on the other hand, it is going to bring distress, common humanity would say it is but just to pay for it.

Dr. Lytle. I should think that if such a thing is done each and every county and city could make a rule to make appropriation and pay these damages as they occur, and pay just what they are worth. Now, I burned about \$135 worth of property in one house. It was invoiced to me by the people in the house at a great deal more, but I knew what was in the house from the report of the nurses and because I had gone through it, and got the Commissioners to allow them \$135 for what was destroyed. In case we drew on the State for things of that kind we would have a great deal of trouble. I think it is about as well to leave that thing rest where it is. In my town I have the confidence of associated charity all over the city, and they all come to me for instruction, and I go to them very often for instruction, and we work together. In the case I spoke of the woman was a little impatient, but her wants were supplied by the charity organization.

Dr. Stout. This argument in reference to destruction of goods in case of contagious disease is timely. We had a case in our town last year and everything in that house, even the clothing, was burned and the County Commissioners settled. The Secretary of the County Board decided that this trouble and expense belonged to the city. The Council met and the Secretary and the city health officers were present and they

looked over it and took an estimate of the property and burned everything, and a council of two attorneys decided it really belonged to the county, and it was paid out of the county funds.

Dr. Walker. In every place where the municipal authorities are human these people will be taken care of; therefore, I am opposed to the motion.

Dr. Stout. Railroad corporations who haul people from one place to another should be liable for the expense incurred from this trouble. There are one or two attorneys who are of the opinion that Fountain County can recover the amount that was expended in those cases from the Big Four Railroad Company, inasmuch as the patient who first took sick was in Champaign, Ill., and had gone away from a hotel that was known as the Railroad Hotel and refused to go to the hospital at all. She ran away and walked over to the train and boarded it there and came in on the train of that road. I think they could be held.

Dr. Hibberd. That is a matter the courts will have to settle.

Dr. Stout. One firm of lawyers there are very much inclined to believe that the railroad company would be liable for the expense and for the damage that was done in consequence of the small-pox being brought into the county.

Dr. Hanmore. I don't think it would be wise to pass such resolutions, or for a law to be passed for the appraisal of the goods destroyed. They might be appraised greatly in excess of their real value. If it was left with the commissioners they could use judgment and discretion and the people would be compelled to take their valuation; otherwise they might hold on and insist on better prices, carrying the case into court, and have endless litigation as the result of it.

Resolution seconded, a vote called for, and resolution defeated.

Dr. Stout. I move you that physicians all over the State be furnished by the State Board of Health with stationery to make their reports to the county health officers.

Motion seconded.

Dr. Griffiths. I am against that. If a physician can't afford to pay for sending to the county health officers the reports of births and deaths and contagious diseases, he is not worthy of the name of high-minded, high-toned physician. It depends, I see, on whose cow is gorged. In the other case here was a

poor woman who lost her boarders, and the expression was against paying her for the loss, but when it comes to paying doctors for sending in their reports I am opposed to it. I move you as an amendment that physicians be not paid for their services in sending in reports of births, deaths and contagious diseases.

Amendment seconded.

Dr. Williams. I protest against the paying of physicians for sending in reports of contagious diseases, because the report would not reach him in time to quarantine the place.

Dr. Stout. That would not cut any figure at all. I have had letters from doctors in my county who say that they believe they should not be asked to furnish these reports unless the State Board of Health furnished the stationery and stamps. I believe if this were done we would get better reports. I am satisfied we will come nearer getting better reports in that way than in any other, and as it amounts to very little I am decidedly in favor of furnishing stamps and stationery.

Dr. Hibberd. It is the smallness of the matter that I am opposed to. If a physician can not pay two cents to send in his reports, then I hope the time is coming when he will be fined five dollars for not sending them in. I believe that every one of us ought to send in reports promptly, and if we don't do it I believe the county health officers ought to make us do it.

Dr. Hanmore. I believe one of the failures to report cases of death is the distance some of the cases are from the city. There is a desire on the part of some physicians to report all the births they can, but they don't want the notoriety of reporting deaths. We have in our county about twenty reports of births to one report of deaths. I don't believe the ratio is anything like that, but I can not get the death reports. The disease reports have been very prompt, and these are the only ones that have been prompt. Birth reports come in very well, but the death reports are very hard to get in. I don't know that paying the physicians would help that very much, and furnishing them stamps and envelopes would not help them at all. A man that will not pay two cents for sending in a report, will not do it until he is compelled to. It would be difficult to furnish this material and be sure that it was applied in the right direction.

Dr. Hurty. We pay too much attention in this life to rights and not enough to duties. Until we begin to think more of our duties in this life we need not expect ever to be governed by the golden rule. When that principle of life government prevails, then we will reach a very much higher state. While we must protect our rights, we must lay greater emphasis upon our duties. Now, why is it the duty of the physician to make reports? In the first place in his hands obviously lies the health of the community and the curing of disease. See what an enormous responsibility is upon his shoulders. If through his negligence disease spreads in a family or community, what an awful responsibility is upon that man, what an awful moral responsibility! When a man enters the medical profession he must feel and should be educated to know the great responsibility that he has taken and the duty he owes to the people because he has taken that responsibility. The law says so great is that responsibility that he will be exempt from certain duties that belong to other men. He is exempt from jury duty, and he is also exempt from the draft in time of war, two great exemptions. Now, the Constitution says that there shall be no class legislation, and that is not class legislation, for it is on the theory that physicians render an equivalent. The law has seen clearly the duties the medical profession owes to the community, and it exacts these duties for exemptions granted. That physician is not a very good citizen who refuses to do his duty. It is his moral obligation, it is his social obligation, it is his legal obligation to report. Suppose the law is oppressive, still to absolutely refuse to obey it is wrong. What right has a physician who breaks the law to its protection? He must report these things for the benefit of all, and in benefiting all he would benefit himself. It seems impossible to me that any physician when these facts are brought to him should insist that he be paid. Every way you look at it it seems wrong that pay be given. A gentleman here touched another point. Suppose you do furnish stamps and paper; that is likely to be abused. Suppose you do pay for reports; it would seem like an insult to offer twenty-five cents for a report. Think of the smallness of a man who would want to be paid for saying his neighbor's house was on fire! Are you not an incendiary if you see a man setting a building on fire and do not tell of it? I do not believe it is possible for you to view this

question from any side and come to any other conclusion than that it is the duty of every Christian, civilized doctor to send in vital statistics.

The second resolution in the nature of a substitute for the first was seconded and carried.

Dr. Walker offered the following resolution :

Resolved, That the sentiment of this conference is that the State Board of Health should supervise the hygienic management of those afflicted with tuberculous diseases of the lungs.

Motion seconded.

Dr. Lytle. I think the advice and the counsel of the health officer would come in good play in many cases. The other day I was called to a house where they had a case of scarlatina. I went to flag the house and the woman was opposed to my doing it, and told me that her daughter, the mother of the child, was ill with consumption and asked me to come in and see her. I went, and found right by the place she was sitting, a spittoon nearly full. I asked the woman what she did with that, and she said she emptied it into the closet. I told her that was wrong, and I went and got disinfectants and gave her advice in regard to the matter. I think, in many cases, the health officers should visit the cases and give instruction, even though there is no law forcing them to do it

Dr. E. C. Schultz. I believe it is our duty to bring this before the public in such a manner that we will attract attention to it, so that those unfortunate people are not given the privilege of moving around among the masses of the people, and when they are confined to their homes that they are not visited by their friends with so little concern. I think it true, perhaps, that nine-tenths of the people are not convinced that tuberculosis can be acquired in the sick room, and yet I am positive it can. I would like to see this brought up in a tangible form. I would amend the resolution by saying that the State Board of Health should incorporate a suggestion that physicians in charge of patients suffering from tuberculosis should restrict visiting with them as though it were a contagious disease.

Motion as amended seconded.

Dr. Hurty. That means that it should be under the control of the health authorities.

Dr. E. C. Schultz. Yes.

Dr. Hurty. When we consider that one death in every seven in Indiana is the result of consumption, the horrible-ness of the present condition appears. This is increasing, and getting worse and worse. In New York they had one in seven and it got up to one in six. They began to look around, and found that probably the fault was in the cattle, and took upon themselves the care of the consumptive cattle, and now, after two years, it has gone back to one in seven. If small-pox is preventable by quarantine, if scarlet fever is preventable by quarantine, why is not this? Of course we have sympathy for the poor mortal who has to drag out a consumptive's existence, but he must not extend the disease. By compelling him to conform to certain conditions which are not onerous the spreading of the disease could be stopped. All he must do is to care for every bit of his sputa. He must do it; it should not be left optional. Then he, at least, is not the center from which it can spread. It stops with him so far as he is concerned. He should do that in common decency at least. To gather it all up in a careful way, carrying spit cloths with him, or the spit cup that is provided now, then he will have the consciousness of knowing that he has not spread consumption. Some physicians dread to tell the patient that he has consumption. We know that in all the cities where the statistics are kept that consumption occurs over and over again in the same houses. That is the experience in every place where they have kept a record. A consumptive infects the house in which he lives. We can prevent that enormous loss. Why not do it? I think that consumptives should be educated and told that they must take care of every particle of sputum.

Dr. Ward. The health officer should have jurisdiction. There is one class of people, the one not able to pay a physician for his services; they are objects of charity, and in cases of that kind the health officer should take direct notice. If he does not do it there are no measures that can be taken to prevent the spread of the disease. For that reason I think that resolution should receive support.

Dr. Channing. As Dr. Hurty said, I am heartily in favor of the resolution, but it should go farther. These advisory laws do not amount to much; if they are not laws to which a penalty is attached they are not of much account. I believe,

in view of the fact of the great inroad that tuberculosis is making in the human family to-day that we should have stringent laws as regards, at least, the destruction of all sputum from the patient, that we should by law compel the destruction of all sputum in the house and out of the house. I think that no consumptive patient should be allowed to go along the street, riding in street cars and railway trains, attending church, spreading disease by his own sputum, which while wet and moist does not harm any one, but as soon as it dries and the broom is used, or the feet scuff it up on the street, the air carries it around and in that way communicates it just the same as small-pox or any other contagious disease. I think that this resolution should go a little bit further.

Dr. Griffiths. Advisory laws, as my brother has said, do not amount to much. I will admit it. And yet I have serious doubts about the communicability of consumption from one to another in the very strong and extreme way in which he states. I was unfortunate enough to lose a son about four years ago from that dread disease. I waited upon him myself for four years, and was in his room until I retired at night, about ten or eleven o'clock. Of course we were cautious, and burned the sputum and used some disinfectant. My daughter, who still lives, also waited upon him. There have been no bad results following his death or sickness. Another member of my family, not in contact with him at all, died in our home during the last year, so I know something about it. But this thing of saying that consumptives should be quarantined and that they should be kept from traveling, is wrong. That is not a disease like small-pox or scarlet fever. It is infectious, perhaps, to a certain extent, but to bring down the strong hand of the law upon them as we do upon these other diseases, I think would be almost criminal, would be inhuman, and I am not in favor of going any further than simple advisory ideas. I think the physician and health officer, by moral suasion, by good advice, by proper sanitary methods, can influence people to do their duty. Beyond that I am not willing to go one step.

Dr. Hurty. The people whom you can influence by moral suasion need no law, it is true; but there are so many who will not believe, that will characterize you as a crank as far as you have gone. Those that are amenable to moral suasion will do as we say without a law; but there are those who will not, and

who will spread it in every direction. Those the law must reach; so you must make the law universal. All you ask of them is to be decent. We must ask them to take care of all the sputum that comes from their lungs, that their families and brother men may not be infected.

Dr. Ward. What do you mean by consumption? What is this resolution intended to embrace? You say "consumption," not disease of the lungs. I certainly would not leave it as loose as tuberculosis, for I know patients suffering from tuberculosis that have no cough at all, but the tubercular bacilli have been found in the various excretions from the body, and there certainly is no danger of communicating the disease, because they have no trouble whatever with their lungs. I think it would be well to give some expression to the term that should be used. I would like to amend by saying, "Those affected with tubercular disease of the lungs." Consumption is a very broad term, implying too much.

Motion as amended seconded and carried.

President Smart (Purdue University). We recently established a department of sanitary science at Purdue, and I am very glad to state its purpose and what we expect to do and are expected to do. You know we have a school of engineering, and we expect to send out men to make designs of water plants, of sewage systems, and to send out men to prepare the plans for these structures in larger cities, great steel structures that go up to the sky. The question of sanitation, the source of the water supply, the method of conveying to the users, the matter of plumbing in these large structures, the matter of putting in a sewer system—these are all very important questions of engineering. The eastern schools have recognized the importance of this matter and have established departments of sanitary science. We educate our pupils in the principles of sanitary science, and they will be competent to do their work. We established this department and asked for one of the assistants from Massachusetts to come to us. We expect to send some of the boys now in these departments to medical colleges, and some of them will become engineers and will be able to do their work in a satisfactory way. I believe we have established the first school of this kind west of the Alleghenies. Our purpose is also to send out information. You are studying it as members of health boards, studying it in medical colleges. We expect to

send out bulletins from time to time on the subject of pollution of water supplies, disposal of sewage, pollution of milk, and so on. Our purpose is to educate and inform, so far as we are able to do so, and not do commercial work. It is not the business of the State to set up an establishment to do commercial work for individuals. We believe it is our duty to do it for the State Board of Health and for the various county and city boards that can not do for themselves. You ought to have, and I trust that you will have, in this city a well equipped laboratory, a place where you can go to do your special work. If you have work to do that can not well be done for want of a well equipped laboratory, you can come here and have a laboratory in which to do your special work. I hope you will have such a laboratory, and I will say the sooner it comes the better. But in the meantime I have felt that inasmuch as we have a laboratory fairly well equipped we invite you all to come and use it, and we will do work for you such as you can not get done here. We will be very glad to have any one of you come there and use it without expense to you. Of course, if you use a great deal of material we will expect you to pay for it. But if you want to use the apparatus and rooms you are welcome to come. We hold ourselves as agents of the State to further the interests of the State officers until you have a laboratory here in Indianapolis. I hope the time will come when you will have such laboratories in convenient parts of the State, if not in every county. We take a conservative course, not a radical course. We expect to educate, to form and furnish facilities, I think these are the legitimate things to which an institution furnished by the State should devote its attention. We will do our work in such a way that you will welcome what we do, We educate students for medical colleges and health departments, for engineers and for large manufacturing establishments.

Dr. Hibberd. I feel at liberty to express the thanks of the conference to Professor Smart for the offer he has made us.

Dr. Brown offered vote of thanks to the medical college,

Dr. Walker offered the following resolution :

Resolved, That the Sixth Annual Conference of the State Health Officers of Indiana is decidedly of the opinion that all medical colleges should, in order to meet the requirements of modern medical science, adopt a four years' course, and that no diploma or degree should be given except after attending for the above period, and the passing of proper examinations.

CATARRH—WHAT CAN SANITARY SCIENCE DO TO PREVENT ITS SPREAD?

Dr. Walker. What kind of catarrh does it mean?

Dr. Hibberd. I suppose catarrh of the respiratory organs. I have no doubt that the idea intended to be conveyed is what is known in common parlance as catarrh, meaning catarrh of the upper respiratory organs. What will you do with it? Should that be taken up by the health authorities, Dr. Hurty? Is it possible in the nature of things to handle it and restrict it? I think we ought to take it up? Have you opinions as to treating it in a sanitary way?

Dr. Walker. I think the health authorities ought to take cognizance of this disease.

Dr. Walker introduced the following resolution:

Resolved, That it is the sentiment of this Conference that the State Board of Health should take notice of chronic naso-pharyngeal inflammation and devise means, if possible, to prevent its spread.

Dr. Schultz. What are you defining under this?

Dr. Walker. Naso-pharyngeal catarrh. Three out of five have it in the city where I live.

Dr. Schultz. I believe that it is recognized that it is infectious. I notice in some of the European countries health boards have decided so and have put it under restrictions. Last year in Paris they did not allow persons suffering with the grippe to be about, they were immediately sent to the hospital.

Dr. Walker's resolution was seconded and carried.

THE SOCIAL EVIL—WHAT IS THE PROPER SANITARY VIEW? DOES SANITARY SCIENCE FAVOR ITS LICENSE AND CONTROL?

Dr. Hibberd. There is a big question there.

Dr. Walker. It should be controlled.

Dr. Hibberd. I understand in St. Louis it is regulated by license.

Dr. Leech. I move that the sense of this Conference is that it should be regulated by statute. In that the State Board of Health have in view new statutes, I think we ought to have one for that.

Motion seconded.

There is a law governing that in the State of Indiana, that it is not to be licensed in this State. There are laws in oppo-

sition to it, and I do not think it would be a matter of sanitary science nor a matter that it is proper for this convention to suggest to a law making body of this State to license.

Dr. Leech. I should think there would be a difference made between licensing it and regulating it.

Dr. Walker. Our duty is to obliterate it.

Dr. Leech. Licensed houses will meet with opposition. As a sanitary officer, it seems to me that it ought to be regulated and restricted. I know cases, one in particular, the daughter of a minister, who spread syphilis all over one community. Her father seemed to be ignorant of the fact that the girl was spreading disease over the county. Her mother was dead. As far as these houses are concerned, I don't see why any poisoned woman should be allowed to run about and spread disease.

Dr. Hurty. Or any poisoned man, either.

Dr. Leech. We certainly can take public prostitutes and regulate them and have them confined and not allow them to go about spreading disease.

Dr. Hibberd. How would it be for every doctor to be compelled to report these cases?

Dr. Leech. The law does not make us detectives. A few years ago a young man was being treated, and said: "I want to be married and I want to be cured soon." The doctor said: "You will not subject this young woman to that disease?" He said: "The cards are out and it can not be put off now." Afterwards he brought his wife in to be treated. There is no way of preventing this. If a man is so degraded as to marry a girl and contaminate her and send her back to her parents to die of that loathsome disease, can not we take hold of him and punish him?

Dr. Hibberd. While there would be no question about this evil or the terrible infliction it puts humanity under, the question is whether we shall bring it under the observation of the Board of Health and see what they can do with it.

Dr. Hammond. I do not believe within the time we have that we can handle a subject like this. It is one of the most stupendous questions that sanitary science has to confront. There ought to be a committee appointed that will make a thorough canvass of that question and present the research and thought of this for a whole year.

Dr. Hibberd. Don't you think this is equivalent to making the State Board of Health a committee?

Dr. Hammond. Yes; and we will start the thing right here.

Dr. Griffiths. I am not in favor of licensing any evil. I am not in favor of putting the sanction of the State upon anything so degrading as that. If there is any way to mitigate it by moral suasion of moral law, I am in favor of that. It seems almost impossible to eradicate these gross evils, but to license this sort of thing, I am opposed to that unconditionally.

It was moved and seconded that this question be referred to the State Board of Health.

Motion carried.

Conference adjourned.

THE PRESENT STATUS OF THE DIPHTHERIA QUESTION.

THEODORE POTTER, M. D.

In what I have to say to you upon this subject of diphtheria, I will try to keep in mind that we are dealing at present chiefly with the question of diphtheria as it arrives before the sanitary officers, and not so much before the practicing physicians. Diphtheria has become a very important disease to us in late years because it is an infectious and contagious disease, and perhaps still more because in recent years it has fastened itself upon the community. All of us can remember the time when there was comparatively little diphtheria, when for considerable time there was an absence of diphtheria; but now in most of our larger communities it is constantly present. In this city we have it all the time, and a number of cases all the time. That is becoming true of a great many of the smaller communities. I suppose in most of the towns and cities of from 5,000 population up there is constantly present diphtheria. This is one of the diseases which the health officer has to consider carefully.

When we come to face the question of diphtheria as the sanitary officer has to face it, there are two or three problems which stand out with especial prominence. In the first place, he has to entertain some definite idea as to what sort of a disease it is; in the second place, there comes the question of its prompt and accurate recognition; and, in the third place, the question of what shall be done to prevent its spread in the community.

Now, in what I have to say to you about these points, the character of diphtheria, its recognition and the means of controlling it, I shall try to avoid as far as possible the questions that are interesting to the practicing physician and deal with those which interest the sanitarian. It is very important that sanitary officers should entertain some very definite and positive ideas as to its character, for upon the views that he holds with regard to diphtheria will depend, not only the action he will take, but the vigor of that action. Diphtheria is an infectious and also a contagious disease. This view is based partly on the old clinical knowledge which is familiar to us all, and partly upon some new knowledge which has come to us in recent years, a positive proof of the infectious and contagious character of the disease, because we believe we have found the specific cause of it and are able to handle that cause. We believe that it is an infectious and contagious disease, not because we see persons around one with diphtheria getting the disease, with the evidence that they got it from the first person, but because we are able to obtain from the seat of the disease a poison which, introduced into the bodies of other persons or animals, will produce that disease. Now, it is of some importance that we recognize this fact, that it is not necessary to demonstrate that this or that particular germ is the cause of the disease in order that we may entertain strong opinions as to its dangerous character. If we can obtain a poison from diphtheria which, when introduced into other healthy living beings, will make them sick and kill them, that is sufficient to make us take every precaution in regard to the disease. If, therefore, we ask ourselves why we believe this is an infectious and a contagious disease, we say in the first place that there is evidence that even healthy persons get it from those who have it; and in the second place, in late years it seems to have been demonstrated that there is in it a peculiar poison which can

be obtained, can be handled and can be transferred to healthy persons, giving them the disease and killing them.

The second question that comes before the sanitary officer is the prompt and accurate recognition of diphtheria, and here again we have two means of recognition; the first the old clinical means, which is familiar to all of us; and second, of recent years again new light has come, giving us greater accuracy in the recognition of diphtheria. It is generally agreed now that diphtheria is a specific disease and that there is in it a specific poison, is a microbe called the diphtheria bacillus. We all know that while it is true that the intelligent physician can as a rule recognize diphtheria as soon as he sees it, yet we have learned in recent years that some of the old clinical signs of diphtheria are not as reliable as they were supposed to be. Diphtheria used to be called the membranous disease of the throat; now we call it a membranous disease of the throat. Not every membranous disease of the throat is diphtheria; therefore this old clinical sign has lost its value. We all know also that there are various forms of throat disease, particularly tonsillitis, which for the time at least are uncertain in character, and the best of physicians are unable to say with certainty for a time whether diphtheria is present or not. It would be very desirable, therefore, if we had more positive means of recognizing the disease, and this we have in the presence of the germ. You know it is becoming quite common for health boards to join with the physicians of a community in identifying diphtheria as quickly and positively as possible by means of this examination. Some questions may arise as to the diagnosis of diphtheria by the health boards. In the first place, the germ is one which is comparatively easy to cultivate, provided some simple requirements are fulfilled; in the second place, the germ is one which is fortunately quickly cultivated, so that within twelve to eighteen or twenty-four hours it can easily be recognized. The diagnosis of diphtheria in this way can now usually be made positively within from twelve to eighteen hours, or certainly within twenty-four hours, usually within about eighteen hours. This method is therefore a quick one and a very reliable one. A comparison of the results by these bacteriological examinations has sufficiently indicated the accuracy of the method. You will ask whether it is possible always to recognize diphtheria in this way? Practically

it is not. There are some possible sources of error. Wherever the examination results in finding this germ the diagnosis is positive, but the search may fail to find the germ and the result simply be negative. There are several reasons for this. In the first place, the examiner may fail to get material from the actual disease; in the second place, antiseptics may have been used in the throat a short time before and have spoiled the material for examination. A negative result is not to be held as proving that diphtheria is not present. It is therefore customary for boards of health who are doing this to announce to physicians that where the first examination fails to prove the disease, he may have a second or even a third examination made, and occasionally the second examination reveals the disease.

If the examination is properly made by some one who understands it, and the materials are properly prepared, it will almost always detect the presence of diphtheria if it is present. For the sanitary officer, therefore, there has arisen a new method of recognizing positively and promptly diphtheria by means of which he can usually see whether or not he has to deal with this disease, within from twelve to twenty-four hours. It is fortunate for him that this is true, because sometimes his work in this connection is difficult. There is sometimes a difference of opinion as to whether a case is diphtheria or not. This difference of opinion sometimes even becomes a little sharp, especially in smaller communities where the personal equation enters more largely into it than in larger communities. In larger communities they are finding by experience that it detects mistakes which they make occasionally, and so any unpleasantness in regard to it is rapidly passing away. It is a fortunate thing for a sanitary officer that there is a means by which, independently of any clinical questions, he may settle the question as to whether he has to deal with diphtheria or not.

Now, there arises in this connection another interesting question. That is the old question of diphtheria and membranous croup, for this question presents itself now to the sanitary officer. I shall have nothing to say about the old controversy on the clinical basis as to whether they are identical, but as the result of these accurate investigations certain facts are brought to light which are exerting a great influence among sanitary

officers. Having discovered a specific germ in diphtheria and a means of positively recognizing this disease, we are in a position to say whether this or that disease is diphtheria or not, and to say whether it is membranous croup or diphtheria, and that is what is being done, and the work of the last year or two has shown that of the cases reported as membranous croup, something like eighty per cent. of them are nothing but diphtheria. It is hard, of course, for those who have entertained the older ideas about them to recognize the meaning of these facts. There are some of the clinical facts which remain as they were and which are, to be sure, somewhat difficult to get over, on the supposition that membranous croup and diphtheria are the same thing and have the same cause, and yet when a case answering to all the signs of membranous croup is found to contain the germ of diphtheria, and they are produced from it and produce diphtheria in and kill animals inoculated with it, we must admit the meaning of these facts.

It seems to have been shown, therefore, by investigations by a number of health boards who are doing this work in New York and Boston and elsewhere—and we are contributing our share here—that something like eighty per cent. of the cases presented as such by physicians are laryngeal diphtheria. It is possible a large number of cases would show diphtheria if made. Some now believe that it is all diphtheria, but we are not compelled at all to admit that view. Just as there are forms of membranous throat which are not diphtheria, so it is quite possible that there are cases of membraneal laryngitis which are not diphtheria. But there is reason to believe that a great majority of the cases reported as membranous croup are diphtheria, larger perhaps than eighty per cent., because there is a greater possibility of error in examining a case of membranous croup than of diphtheria, because where the disease is in the larynx dependence must be placed upon passing a swab over the larynx to get the material, and it is quite possible, therefore, that in all these cases of membranous croup, if a piece of membranous croup coughed up were examined, more than eighty per cent. would be proved to be diphtheria.

But we must admit this fact. It seems to have been sufficiently demonstrated that a large number of cases reported as membranous croup are diphtheria, and it is coming to be the common practice with the Health Board to deal with cases of

supposed membranous croup as though they were diphtheria, and evidently they are wise in doing so. This is occasionally a little irritating to some one who entertains strongly the old ideas and who is very sure that he can recognize membranous croup when he sees it, or when he does not see it, and he is positive that membranous croup is not pertaining to diphtheria, and resents the interference of the Health Board. Now, such men have to be told kindly and firmly the facts that some eighty per cent. of such cases are proved to be diphtheria, and it is the part of wisdom to act as though they all were, and if they can not see that point I suppose it is no use arguing with them.

Now, as to the question of dealing with diphtheria in the endeavor to limit its spread, I will again omit the older knowledge which has come to all. I know you want me to say something to you about the method of dealing with disease by the use of the so-called antitoxin. The antitoxin treatment, so-called, of diphtheria and of some other diseases has an interesting history. It is not an accident; it is an example of a means of treatment which has come step by step as the result of painstaking scientific work. When, after the germs of disease had been discovered, the question, of course, naturally suggested itself to men, whether these facts could not be made use of to counteract the disease. The interesting fact has been known from time immemorial that in certain of these diseases one taken protects against others, and the question is, what is that protection due to? The antitoxin treatment is the final outgrowth of the endeavor to settle these questions. After the discovery of the disease germs and the method of working with them had been made, endeavors at once started to find some way of using these facts either to cure the disease or to protect against them, and various lines of work have grown out of them.

Then another line of work has followed the method of using the chemical production of the germs got by cultivating the germs, based upon the idea that inasmuch as the germs did their work in the body by producing new chemical bodies, the protection was due in some way to these chemical bodies. Therefore another attempt to control this disease has followed with using the chemical production of the germ, the one which has stood out most prominently in the treatment of tuberculosis.

Some years ago it was found out that the blood serum had an antibacterial influence, that it was in itself in a measure destructive of or inhibitory to the growth of bacteria in the body. Out of this announcement has really grown the antitoxin treatment of diphtheria and some other diseases, for it attracted attention to the blood as the channel in which this work was done. It was found that not only did the blood serum produce a certain amount of antibacterial property, but that when animals had been rendered impervious to disease their blood had this property. The outgrowth of this was the method which is now followed in producing the antitoxin, to put animals through a process as the result of which they obtain a high degree of immunity, and it is found that this resisting power resides in the serum of the blood and that it can be transferred from one animal to another. This is the so-called antitoxin treatment.

There are some very peculiar and interesting facts in regard to it. For instance, it is found that the blood serum of some animals which have a strong natural immunity against the disease has little or no power for another. The dog, for instance, has a strong natural immunity to tuberculosis, but the blood of a dog in another animal liable to the disease will not protect it. On the other hand, animals who have a natural immunity to the disease, but whose blood serum can not be used for transferring, can be put through this process and then their blood seems to contain that antitoxic property and the property of transferring that immunity to other animals.

It is, however, beyond our purpose to night to go into the discussion of some of those very interesting questions. I know you would like me to say something in regard to the particular steps of the antitoxin treatment. We ought to separate as distinctly as possible the proven things in regard to it from things which are as yet unproven or theoretical. Now what may be said to have been really demonstrated in regard to this antitoxin treatment? In the first place it may be said that diphtheria is a specific disease with a specific germ, which germ can be artificially cultivated and transferred to living animals, and the poison obtained from this germ and introduced into a healthy animal will kill it. Again, animals can be put through a course of treatment by giving them this poison so that they can resist this disease. Now, these seem to be the

facts about it. This serum can be taken and given to animals in such doses that they are practically entirely protected against the poison of diphtheria, or, if they have first been treated with the poison of diphtheria, and soon afterwards the serum of antitoxin be introduced, they can with almost certainty be protected. But as time goes on larger and larger quantities are needed to antagonize the poison, until the time comes when it fails. When we come to ask ourselves whether the same thing will be true of human beings, we do not know. We have to find out by experiments. It appears as though the facts which have been found with experiments with animals were borne out with the experience with human beings. We find if the antitoxin is given before diphtheria, it seems to be almost a specific protection. If it is given soon after diphtheria, it seems to be almost a specific cure. The experience with human beings seems to bear out and confirm the experience with animals. But we are not to expect that the same results would be gotten in ordinary medical practice as in the laboratory with animals. In the first place, healthy animals are experimented with, while the human beings are not. Some are suffering from chronic disease, some are recovering from acute disease. In the second place, our animals in the laboratory can be dealt with as we please. We take healthy animals and give them the antitoxin and the poison when we please. We can not do that with human beings; we can not always get the cases promptly. Some of them are insidious in their course and run from two to three days before they are recognized. So we ought not to expect the same results at the bedside that we get in the laboratory. If the statements from the laboratory are to be taken as true, it does appear as though in the antitoxin there was practically a specific against diphtheria, a means by which it could be absolutely prevented, and a means by which, if introduced quickly, the disease can with almost entire certainty be cured. Whether the same thing will be true in the experience of human beings remains to be seen; but when we sift the evidence which has been accumulated, it does look as though the same things which are true of animals are true of human beings.

Perhaps the best summary which has been made of this question is that which has been made by Dr. Welch, of the Johns Hopkins Hospital. He reviews the whole question, and

comes to the conclusion that unmistakably the antitoxin is a valuable means of preventing and curing diphtheria.

Now there arise two or three questions in regard to it, and those are the questions that you sanitary officers will have to deal with, because if he publicly advocates it he will have to face the question whether it is dangerous or not. So far as animals are concerned, it does not appear to have much if anything dangerous in it. It has been used thousands of times upon animals, and without evidence of any serious harm. It has been used upon many thousands of human beings, and it must be admitted without much evidence of serious harm. There have been a few instances of death, apparently due to the antitoxin. Just what is the explanation of that it is difficult to say. There have been reported of late a few cases when death occurred within a few minutes or hours after the introduction of the substance. Now, whether it was the hypodermic injection getting into the blood centers or not we do not know; but it seems safe to say that on the one hand antitoxin is dangerous. Certainly after it has been administered as many thousands of times as it has with so little apparent harm, we are not warranted in charging anything serious against it. On the other hand there have been cases in which it has apparently killed, and that promptly, whether from the effect of any accident that may have occurred or due to something in the antitoxin we do not know; it may have been carelessly prepared, or something of that kind. I am inclined to think that since the death of the child of a prominent Berlin physician, which occurred a few weeks ago, the German laboratories will not be quite so positive that it is absolutely harmless. Any one who has injected the antitoxin and seen a sick child for several days after will be conservative in his statements.

There is just one other thing which I care to say, and it is this: That it is possible, now that this matter is becoming somewhat old, that the preparation of the antitoxin may be more careless than it was at first; that some of the preparations are getting old, and that possibly some of the bad results which have been recently reported are due to things of that kind. It therefore is important for us to see that the whole thing is done carefully; that so far as we are able to judge good preparations are used, and each bottle, so far as we are able to do it, shown to be good. Certainly it is a very simple

thing for any one to obtain a bottle and see if there is an odor of putrefaction about it. Health boards are now able by comparatively simple means to recognize diphtheria promptly, positively and accurately, and thus to afford to themselves the positive grounds for action. So far as the antitoxin is concerned, it would seem as though the facts would warrant any health officer in advising its use.

We, for Committee No. 4, respectfully submit the following:

Whereas the rotations of County Health Officers practiced in most counties of our State, insures but one year's service to the Secretary, the accomplishment of any considerable good in the way of districting and organizing district societies looking to a more perfect sanitation of our State is impracticable.

Secondly, as there are only three members of our committee present and the second proposition, viz.: Other matters that will increase the efficiency of the State Board of Health seems so general and comprehensive in its scope, we feel that this body at this time should thoughtfully consider it and recommend anything that promises to increase the efficiency of our State and Local Boards of Health.

We believe that united and continued effort on the lines marked out by our State Board of Health will accomplish much and lasting good; but spasmodic and interrupted effort will ever be productive of barren results. This was signed by Drs. S. H. Pearse, J. T. Wheeler, J. B. Lyttle. Adjourned.

The following letter refers to the failure of Secretaries to fill out and return a blank asking for information concerning public water supplies:

INDIANAPOLIS, May 20, 1896.

DEAR DOCTOR—On April 27, we sent to you a blank to be filled and returned which was entitled a circular of inquiry. We are at a loss to understand why no answer has been returned by you. A second blank is inclosed, and you are urged to fill the same and return to this office without delay. The information asked for is very important to this office, and we hope you will be pleased to help the cause of sanitary science in this State.

Very respectfully,
J. N. HURTY,
Secretary.

INDIANAPOLIS, May 28, 1896.

Resolved, That the State Board of Health of Indiana most earnestly opposes the legislation proposed by Senate Bill 1552, entitled "A bill for the further prevention of cruelty to animals in the District of Columbia."

Resolved, That the proposed legislation would, in the opinion of this Board, be bad in every way. It would stay progress in biological and medical science; it would hinder advancement in sanitary science, inasmuch as it would prevent experiments relating to the cause, prevention and cure of infectious diseases of man and of the lower animals; it would aid cruelty because it is less cruel to kill animals that we may know, than to kill human beings because we do not know.

Resolved, That physicians and others who are engaged in research work having for its object the extension of human knowledge, and the prevention and cure of disease are the best judges of the character of the experiments required and of the necessity of using anesthetics, and that in our judgment they may be trusted to conduct such experiments in a humane manner and to give anesthetics when required to prevent pain. To subject them to penalties and to espionage, as is proposed by the bill under consideration, would, we think be an unjust and unmerited reflection upon a class of men who are entitled to our highest consideration.

Adopted by the State Board of Health of Indiana, May 28, 1896.

The following letter was sent to every railroad superintendent in the State:

INDIANAPOLIS, June 7, 1896.

DEAR SIR—You are doubtless aware that in some European countries and in several States in this country steps have been taken to stop the spitting nuisance. Sanitary science has positively proved that consumption of the lungs, la grippe, nasal catarrh and many minor ills of the respiratory passages are propagated by spitting. The disease germ is in the sputum. The affected person distributes sputum freely and promiscuously; it eventually dries up, mixes with the dust and is borne on the air. Well persons breathe it and may become infected. Will you not co-operate with this Board in an endeavor to stop spit-

ting in your cars and stations? Spittle is excrement when ejected, and whether it is diseased or not, it should, like other excrement, be decently disposed of. Spitting is a nasty and unnecessary habit. Women don't spit.

The method proposed for the suppression of the nuisance is as follows. This Board will pass a rule (it has legal authority to do so) against spitting. Said rule will have the force of law when promulgated as other laws are, by being published in a paper of general circulation in each county. This much we can do and will do, if the railroads will post a Board of Health rule against spitting and also make a strong and continuous effort to enforce it.

When the rule is first published in each county and when posted in public places, this Board will, of course, be loudly abused as foolish, impracticable, idiotic, etc. Attention then being gained, we will publish in every county reasons for the action. These reasons will be approved by all decent and cleanly people. The filthy will reject and resent and desire to be filthy still. Our reasons will be brief and lucid. They may be printed upon a small card by the railroad and supplied to conductors, brakemen, stationmasters, etc. When any one is seen to eject his spittle his attention will be called to the rule and a card politely handed to him. If after this he continues his filth making he may be ejected from the car as a nuisance, being publicly nasty and indecent and a promoter of disease. He may also be arrested upon warrant and tried for the violation of the health rule.

The Health Boards of Illinois and Ohio are certainly ready to join in this work. Your suggestions and criticisms are requested. Please let us hear from you.

J. N. HURTY,
Secretary.

PROPOSED CARD WHICH WILL BE HANDED TO PUBLIC SPITTERS.

Spitting in public places is prohibited by the State Board of Health for sanitary and economical reasons and for the sake of common decency. Consumption of the lungs, nasal catarrh and la grippe is produced, in almost every instance, in the person affected by breathing infectious dried spittle. You may be the next victim.

The disease germ is in the sputum. The affected person spits upon the floor; the spittle eventually dries up, mixes with the dust and is borne in the air. Well persons breathe the disease-laden dust, become infected and then wonder how they got sick.

Your spittle is excrement when ejected, and whether it is diseased or not, it should be decently kept out of sight as other excrement is. Over 3,000 died in Indiana in 1895 from consumption and over 500 from la grippe, mostly caused from breathing dried spittle. If the railroads would destroy life in this wholesale way they would be abolished. You are asked to join all good citizens in suppressing the nasty disease-spreading habit of spitting.

PROPOSED.

Rule No. 34. Spitting on sidewalks, floors of public buildings, in street cars, in railway coaches, in railway stations and on railway platforms is forbidden.

Rule No. 31. Any person or persons failing or refusing to comply with either or any of the foregoing rules shall be subject to the penalties in section 9 of an act establishing a State Board of Health, passed February 19, 1891.

	DOUGLAS C. RAMSEY, M. D.,
J. N. HURTY, M. D.,	President.
Secretary.	

General letter concerning the pollution of streams:

INDIANAPOLIS, June 9, 1896.

DEAR DOCTOR—You are probably informed as to the terrible experience which Indianapolis has recently had with her water-works. White River is drawn upon for part of the supply, as deep wells contain too much iron and the first gravel will furnish only a small percentage of the amount needed.

The town of Broad Ripple, nine miles above Indianapolis, dumped garbage and vault cleanings into the river, and at Noblesville a straw board puddle twelve feet deep and forty acres in extent broke its banks and ran into the stream. Noblesville, Anderson and Muncie all pollute White River with garbage and sewage. Indianapolis in her turn adds her waste to the river and so it has become an open reeking sewer. The

cities on the Wabash do to their river the same violence. This, of course, is a sin against health and decency, the penalties for which in nature's court is sickness, disease and death. I review these facts and write to inform you that every city that throws its garbage or sewage into any stream is violating a State statute. The towns on the Wabash throw all their garbage into the river and also empty their sewage therein. Great dilution, but little purification occurs before this reaches your city. The diluted sewage and garbage of ——— is certainly not wholesome for ——— people. And the people living below you will not find the diluted sewage of ——— healthful. As the population increases and the streams grow smaller (both are happening) the people will more and more feel the effects of this wrong method of garbage and sewage disposal. We will wake up some day and find our rivers and creeks noisome, sewage spreading ill health in every direction. This is now the condition that prevails in Massachusetts and other thickly populated States. Having polluted the ground and streams, they now have no drinking water except it is gotten at great expense. Had they early disposed of their garbage and sewage in a hygienic way, thousands of lives, a vast amount of unnecessary sickness, and large sums of money would have been saved. If the people of Indiana are wise they will begin immediately to do what nature will compel them to do later. Not a little ill health and consequent pecuniary loss is now being felt on account of past ground and stream pollution.

Economy, decency, health, all demand that every city and town should burn its garbage and erect sewage disposal works. Not to do this will be proved in the future to be the wildest extravagance.

The object of this letter then is to induce you to start a campaign of education. Tell your people that it is wasteful and wicked to deliver the sewage into streams. Wasteful, because the excrement should be used for fertilizer, instead of throwing it away and then buy guano in South America. Wicked, because a sewage laden stream brings to others ill health and death. Sewage should be disposed of by the "sewage farm" method or by sewage filter beds.

Inaugurate in ——— this sanitary movement for economy, decency and right. When the beam is out of your own eye then notify ——— that she may remove the one from her eye.

The purport of this letter goes to all the cities in the State. Please show this letter to Dr. ———, President of your City Board of Health, and let us hear from you.

Very respectfully,

J. N. HURTY,
Secretary.

INDIANAPOLIS, June 16, 1896.

DEAR DOCTOR—Your reports for our second quarter, which ended March 31, have not been received. We have written you twice before concerning this matter, and are at a loss to understand why we have not received the courtesy of a reply.

The delinquent counties are very few, and we urge you to reduce the number by one without delay.

J. N. HURTY,
Secretary.

Copies of this letter were sent to the following counties: Cass, Dearborn, Elkhart, Hamilton, Newton, Scott, Wabash, Warren, White, Whitley.

INDIANAPOLIS, June 20, 1896.

DEAR DOCTOR—On April 27, and again on May 20, we sent to you a blank (third copy inclosed) asking you to promptly fill the same and return. All but five counties have made answer, and yours is one of the five. It will require very little time to fill the blank, and you are urged to do it. Please do not delay or put it off again. Our annual report should show your county as well as the others.

Hoping you will give this matter your attention, I am, very respectfully,

J. N. HURTY,
Secretary.

Copies of this letter were sent to Wabash, Parke, Monroe, Dekalb and Cass Counties.

FOURTH QUARTER.

OFFICE STATE BOARD OF HEALTH, }
 INDIANAPOLIS, October 6, 1896. }

Regular meeting of the Board.

Present, Drs. Ramsey, Whitesides, Davis, Forrest and Hurty.

President Ramsey called the meeting to order at 10:50 A. M.

Minutes of last meeting approved and signed.

The following bills were allowed :

J. N. Hurty, traveling expenses	\$49 63
J. N. Hurty, traveling expenses	7 60
G. S. Carter, salary	150 00
J. N. Hurty, salary	300 00
Albert Sahm, postage	30 00
C. P. Houser, dictionary	50 00
American Toilet Supply Co.	1 00
T. Henry Davis, traveling expenses	10 00
D. C. Ramsey, traveling expenses	25 00
J. H. Forrest, traveling expenses	28 00
L. L. Whitesides, traveling expenses	98 70
J. N. Hurty, office expenses	6 00
<hr/>	
Total	\$735 93

A communication from the National College of Electro-Therapeutics was read.

Motion to lay on the table, by Dr. Davis, carried.

A communication was read from Wm. H. H. Graham, asking permission to remove the body of David P. M. Loed from Anderson to Waveland, Indiana. It was supposed that he died from diphtheria, but it was by no means certain. The undertakers, Sells Bros., testify to having embalmed the corpse, and placed it in a hard oak case, hermetically sealed in galvanized iron.

Moved by Dr. Forrest that permission be granted to remove the corpse, subject to all sanitary precautions.

Carried.

The following petition, with letters from Munster, were presented :

Secretary Board of Health, Indianapolis, Ind.:

We, the undersigned, vegetable growers in the State of Indiana, and residents of Strathmore, Lake County, do hereby petition your honorable body to withdraw your objections to the shipping of paunch manure from the Union Stock Yards at

Chicago, to Strathmore, which we are obliged to have for fertilizing purposes. We have enjoyed this privilege until recently, when we learn that your department objects to the shipment of such matter into the State.

Signed,

HENRY GRUGEL,	A. D. JABAAY,
A. JABAAY,	P. NAVEN,
C. JABAAY,	G. KOOY,
PETER JABAAY,	J. TRESENNNA,
G. B. NIKLART,	WM. GRUGEL,
F. MILLER,	JACOB KOEK,
JOE GRUGEL,	JOHN KOOY,
TOYS JABAAY,	JACOB MUNSTER.
WM. HOOK,	

MUNSTER, IND., October 2, 1896.

DR. J. N. HURTY—Would you please let us know if the Board of Health has taken any action on the petition we sent you in regard to the manure to Strathmore, Ind., for we would like to know on an early request if possible, for we must have the manure for our farms, and now is the time to do it. So please, Dr. Hurty, let us know at once.

Signed,

MR. HENRY GRUGEL.

MUNSTER, IND., August 10, 1896.

State Board of Health :

Please let me know if you will withdraw your objection of letting us have manure for our farms, for you know that farmers can't do without manure, and, Mr. Metcalf, this petition is signed with us farmers surrounding of four miles nearest to the Strathmore switch; so please do withdraw your objection, for we must have it; and let me know at once if, or if not, so that we may know what we are about.

Signed,

HENRY GRUGEL,
Committee.

Dr. Davis moved that the Secretary investigate and act as in his judgment seemed proper.

Carried.

Secretary Hurty presented the following resolution :

Resolved, That the word "advise," at the end of third line of Rule 10 of Rules and Regulations for the Government of Town, City and County Boards of Health, adopted by the Indiana State Board of Health, December 12, 1895, be stricken out, and the word "compel" substituted therefor.

Dr. Davis moved that the resolution be tabled.

Carried.

Moved by Dr. Forrest that the following amendment to Rule 11 be made :

Strike out the words "and where there is no organized Board of Health," in lines two and three; also striking out all after the word "duty," in the third line, up to and including

the word "application," in the fifth line, and inserting therefor the following: "To immediately report the same to the County Health Officer, and upon the receipt of such notice, it shall be the duty of said Health Officer to placard the house in which such disease prevails, by placing a flag or card with the name of the disease thereon not less than twelve inches square, in a conspicuous place on said house."

Carried.

The following rules for the sanitary government of schools were introduced by the Secretary :

INDIANA STATE BOARD OF HEALTH—HEALTH CIRCULAR No. 4—
SPECIAL RULES GOVERNING THE SANITARY CONDUCT OF
PUBLIC, PRIVATE AND PAROCHIAL SCHOOLS IN THE STATE
OF INDIANA. PASSED OCTOBER 12, 1896.

EXPLANATION.

"Simultaneously with the annual opening of the public schools, diphtheria, measles, mumps, scarlet fever and many other diseases usually increase. This is caused by the congregating of the pupils. They mass together, and contact spreads infection. Some few pupils may have just recovered from a communicable disease, or they may be from families that have been smitten, and, being infected, they transmit disease to those who are susceptible. It is reasonable to assume that the suddenly imposed confinement in the school after a period of freedom frets the children for a few days, causing more or less nervousness, and so resistance is temporarily lowered. In this way susceptibility may be increased, and sickness may more readily follow. To do all that is possible to prevent the usual school-opening increase in illness is the object of these rules.

"It is ordered in the rules that desk-tops and banisters be washed with soap and water and afterward be treated with a disinfectant. This is required because disease germs may be planted upon exposed desk-tops and banisters by infected persons, and, being transferred by the children's hands to their mouths, disease results. The washing and disinfecting will do much to prevent infection from this source.

"Open water buckets and large tin cups are condemned, because the dipping of water with cups which are used by many introduce spittle into the supply; and, besides, open buckets catch dust and dirt. Diphtheria, diarrhœa, sore mouth and other complaints have been transmitted in this way. This source of disease may be avoided to a considerable degree by supplying a covered tank with a large free-flowing faucet and a small cup. The opening of a large faucet will furnish a strong stream, which will suddenly fill the cup and wash the saliva from the edge. Ample drainage must be provided for carrying away the waste water.

"Slates are condemned because of their uncleanness. Writing and figures being obliterated, as they frequently are, with spittle, and as the damp slates readily collect dust, the danger of the transmission of disease in this way is very great. Small children generally place pencils and pens in their mouths, and if these articles are promiscuously distributed without being sterilized, as the rules

direct, infection may result. The collecting of pencils seems necessary to always insure one to each pupil.

"Spitting is prohibited because it is a possible source of disease, is filthy and is unnecessary.

"It may seem shocking and unnecessary to many to exclude consumptives from the schools, but when we stop to think that tuberculosis causes one in every seven deaths, killing more people annually than cholera, smallpox, diphtheria, scarlet fever and yellow fever combined, then it is time to lay aside that sentiment and pity which would perpetuate disease and death, and take on those qualities in that higher form which makes them forces for more abundant and better life.

"These rules may seem trifling and unnecessary to those who have not given consideration to modern sanitation, but the teacher more than any other public officer may secure the physical well-being of the pupils as well as the intellectual advancement.

"It is hoped that all the school authorities of the State will promptly enforce these rules."

DOUGLAS C. RAMSEY, M. D.,

J. N. HURTY, M. D., *Secretary.*

President.

SPECIAL RULES.

RULE 1. All teachers of public, private and parochial schools, all county, city and town health officers, and all school authorities, shall refuse admittance to the schools under their jurisdiction of any person from any household where contagious disease exists, or any person affected with any evident or apparent communicable disease, or any person who may recently have been affected with diphtheria, membranous croup, scarlet fever, whooping cough, contagious skin disease, measles or other communicable disease, until first presenting a certificate signed by a reputable physician stating that danger of communicating such disease is past, and said certificate is approved and indorsed by the Health Officer in whose jurisdiction the person may reside.

RULE 2. School Commissioners, School Trustees in cities and towns, and Township Trustees, and all authorities governing private or parochial schools, shall have the school houses under their control put in sanitary condition before school is opened, and kept so throughout the year. Floors shall be scrubbed, windows cleaned, desks and all woodwork washed with soap and water and treated with a disinfectant. Windows shall be in repair, so that ventilation may be made perfect. Heating apparatus shall be efficient and in good order, and dirty walls and banisters made clean. Banisters and tops of desks shall be washed with soap and water and treated with a disinfectant once each week.*

RULE 3. School Commissioners, School Trustees in cities and towns and Township Trustees shall provide small drinking cups, not to hold over a gill.

*The disinfectant for treating desk tops, banisters, etc., and for use in urinals and closets may be cheaply made by the following formula and kept on hand in any quantity desired. To make ten gallons: Chlorinated lime, 40 ounces; soft water, 10 gallons. Thoroughly stir together and let stand until clear. The undissolved lime will fall to the bottom and the clear supernatant liquid may be used on the desks, banisters, base boards, etc. The fresh, milky mixture, as well as the creamy sediment, may be used in urinals, closets and sinks. This disinfectant is not poisonous or dangerous. Chloride of lime of the best quality may be purchased in quantity for 5 cents per pound. The cost of the disinfectant is, therefore, less than 2 cents per gallon. The use of all patent or secret disinfectants is discouraged by the State Board of Health.

Buckets or pails to dip from are condemned, and reservoirs or tanks of ample size, having large, easy acting, free flowing faucets shall be provided. When water is drawn direct from public water pipes or pumps, reservoirs or tanks are, of course, not required. Ample drainage facilities for waste water shall be provided, and the pupils directed to allow the cups to flow over when the water is drawn. Drinking cups shall be cleaned and sterilized daily.

RULE 4. Slates are condemned. Paper tablets or pads shall be used instead. Riveted metal boxes of tin or galvanized iron, with hinged covers and of proper size, or other approved apparatus to subserve the same purpose, shall be provided for each school room. These are to receive pens or pencils, which must be collected from the children each day, and shall not be again distributed until box or apparatus with the pencils and pens have been sterilized by heating in an oven at or above boiling heat for one-half hour. School Commissioners and School Trustees in cities and towns, and Township Trustees, are directed to enforce this rule.

RULE 5. Heating and ventilating shall be looked after with great care. Every school room shall be provided with a thermometer and a temperature not exceeding 75° Fahrenheit, nor less than 65°, be maintained during school hours. School Commissioners and School Trustees in cities and towns, and Township Trustees, are directed to enforce this rule.

RULE 6. Janitors when sweeping shall use damp sawdust or slightly sprinkle in order to prevent dust. Dusting shall be done with damp cloths. School Commissioners and School Trustees in cities and towns, and Township Trustees, are directed to enforce this rule.

RULE 7. The water supply shall be pure and wholesome, and closet or privy facilities shall be unobjectionable. School Commissioners and School Trustees in cities and towns, and Township Trustees, are directed to enforce this rule.

RULE 8. Spitting on the floor of any school building is absolutely forbidden. Teachers and all school authorities are directed to enforce this rule.

RULE 9. School Commissioners and School Trustees in cities and towns, and Township Trustees, shall not employ teachers who are afflicted with pulmonary tuberculosis or any constitutional contagious disease; neither shall they permit pupils so affected to attend school; nor shall they permit filthy or unclean pupils to attend the schools under their control.

DOUGLAS C. RAMSEY, M. D.,

J. N. HURTY, M. D., *Secretary.*

President.

STATE BOARD OF HEALTH.

DOUGLAS C. RAMSEY, M. D., *President.*

L. L. WHITESIDES, M. D., *Vice-President.*

J. N. HURTY, M. D., Ph. D., *Secretary.*

JOHN H. FORREST, M. D.

T. HENRY DAVIS, M. D.

Dr. Davis introduced the following resolution :

Resolved, That the rules be published by the Secretary of the Board of Health, and a copy sent to the School Trustees, Superintendent and School Instructors of the State, and that they be advisory, and that they be urged to carry them out.

Resolution lost.

Moved by Secretary Hurty that the school rules be passed as read.

Carried.

Miss Mary A. Newell exhibited an invention intended to care for pens and pencils. Said invention was explained to the Board, and the following resolution was introduced by Dr. Davis :

Resolved, That the device exhibited to the Board by Mary A. Newell, designed for the use of schools, said device for the collection, preservation and disinfection of pens and pencils, has been under consideration, and we find no objection to said device for purpose intended.

Laid on table.

Moved by Dr. Ramsey, that the Secretary purchase for each member of the Board a complete physician's infectious disease outfit.

Carried.

Moved by Dr. Ramsey that the Secretary be directed to order the Health Officers to provide themselves with a physician's infectious disease outfit.

Carried.

The following resolution was introduced by Dr. Davis :

WHEREAS, Danger threatens the public health by reason of the transportation of dead bodies improperly embalmed ; and

WHEREAS, The Indiana Funeral Directors' Association has decided to ask the next Legislature that a law be enacted establishing a standard of requirement in the art of embalming, and providing for examination and license; therefore be it

Resolved by the State Board of Health, That we heartily concur with any action that may result in the better protection of the public by demanding the most improved method of embalming. Be it further

Resolved, That the Secretary is hereby directed to furnish a copy of the above to the Secretary of the Indiana Funeral Directors' Association.

Unanimously carried.

Moved by Dr. Whitesides that the Secretary be instructed to subscribe for the *Daily Journal* and *Sentinel* for each member of the Board for the following year.

Carried.

Adjourned.

INDIANA STATE BOARD OF HEALTH—HEALTH CIRCULAR No. 5.

DIPHTHERIA.

ITS SANITARY FEATURES—DIRECTIONS FOR ITS PREVENTION AND SUPPRESSION.

Diphtheria is virulently contagious and infectious. Membranous croup is diphtheria of the larynx, is more fatal than the ordinary diphtheria, and requires extraordinary care.

Diphtheria may be acquired by direct exposure of the well to those suffering from the disease, and also through clothing and other articles that have come in contact with the sick.

One attack of diphtheria does not afford any protection against subsequent attacks.

Diphtheria poison may remain inactive in a house for a long time and, unless destroyed by disinfectants, may cause a new outbreak at any time.

The spread of diphtheria is favored by faulty ventilation, overcrowding, filthy conditions of habitations and persons, damp cellars and general dampness of houses.

Animals may have diphtheria. Common fowls, cats and cows are particularly liable to the disease.

The origin of the seeds of diphtheria, like that of corn and wheat, is unknown; but it is known absolutely that every case of the disease proceeds from a previous case.

Diphtheria is more common in the cold months, for then there is less fresh air in the houses, and colds and irritated air passages more generally prevail. Persons who have catarrh, or who are subject to sore throat, or whose health is run down, or who are underfed, are apt to catch diphtheria.

PREVENTION, CONTROL AND SUPPRESSION.

This is accomplished by proper living, isolation of the sick, rigid quarantine of all who have been exposed, thorough disinfection and the proper use of fresh, reliable diphtheria antitoxin.

When diphtheria prevails, even to a slight degree, in your neighborhood—

Do not go to meetings in crowded places.

Do not permit your children to go to day school, Sunday school, picnics, parties or entertainments.

Do not permit your children to roam the streets.

Do not fail to supply good, nourishing food to children, and give them plenty of fresh air.

Do not go into a house where there is a case of diphtheria, and do not come in contact with any person who has entered the house.

Do not eat or drink in the same room with the sick person, if diphtheria is in the house, and do not let any one else use the same cup, plate, glass, spoon, knife or fork used by the sick person until they are thoroughly boiled in water.

Do not expose children to diphtheria in any way. When grown people are obliged to go into the room of a person who has diphtheria, they should bathe and change their clothing before they go where children are.

Do not let children use a privy in which the discharges from diphtheria patients are thrown.

Do not permit children to live in the house where diphtheria exists, if it is possible to send them away.

Do not permit cats, dogs, canary birds or other pets to remain in a room where a person has diphtheria, for animals may easily have the disease and carry it to other houses.

MANAGEMENT OF DIPHTHERIA.

It is very difficult to determine in the beginning whether or not the sickness is diphtheria. It is wise, if diphtheria exists in the neighborhood, to be on the safe side, and take it for granted that when any one has sore throat, foul breath and fever, it is diphtheria. Separate such person from all others, except the necessary nurses, and call a physician.

If possible, persons sick with diphtheria should be placed in a large, light, airy room. Remove carpets, curtains, table covers, plush chairs, and all articles which are not needed. Heat with an open fire if it is possible, and give the patient an abundance of fresh air, night and day. Let no one enter but the nurses and the doctor.

Clean rags should be used to absorb the discharges from the mouth and nose of the patient, and should be immediately burned after use. Keep a quart of strong solution of chlorinated lime in the night vessel. When the patient uses the vessel, immediately empty it, and then put into it another quart of the lime solution.

All plates, knives, forks, spoons and glasses used by the patient must be boiled in water at once.

All clothing, sheets, pillow-cases, towels, blankets and other cloth articles, should, before they are taken from the room, be put into a pail or tub half filled with a solution of chlorinated lime. Then they must be taken out very soon and boiled for at least twenty minutes.

If the house is small and the patient can not be isolated, then no member of the family should leave the yard. In tenement houses, or in houses sheltering more than one family, the health officers will give special orders. Supplies can be brought to the gate or door, and in instances where poverty demands the Township Trustee will furnish food.

Physicians should put on a linen duster and skull cap when they enter houses to visit patients sick with diphtheria or other contagious disease. They must carry the duster and cap in a special valise containing a disinfectant which will destroy all infectious poisons. When leaving the house they must wash hands and face with antiseptic soap, and replace cap and duster in the valise. The disinfectant (formaldehyde) in the valise will kill any infection.

A person who has had diphtheria may spread the disease for six to eight weeks from the beginning of the attack. Danger of spreading exists so long as diphtheria germs remain in the throat. The physician must make culture tests to determine this point, and no person, after recovery from an attack of diphtheria, should associate with others, nor go to church or school, or appear on the streets, until the throat no longer shows disease germs upon culture. When cultures can not be made, the physician will have to use his best judgment in deciding whether or not the patient may safely go out.

Diphtheria germs have been frequently found in the throats of persons who were quite well, and who were not afterward brought down with the disease. Some people are not susceptible to diphtheria, and the germs, although present, can not grow and cause the disease. A high authority tells of a nurse who carried diphtheria germs in her throat for a long time, and introduced the disease into five

families. This fact explains in a degree how it is possible for diphtheria to appear when there seems to have been no exposure, and it also teaches us to be very sure that recently recovered patients are free from diphtheria germs before they are allowed to again go out.

All the clothing of the sick person should be disinfected before it is worn again, not neglecting that the patient had on when taken sick.

After recovery or death, all articles which have come in contact with the patient, together with the room and all of its contents, should be treated as follows:

PURIFICATION AND DISINFECTION.

1. Thoroughly boil everything which can be so treated.
2. All articles which can not be boiled must be spread out on chairs. Mattresses should be opened and stood on edge. Open all closets, chests or trunks, but let nothing remain in them.
3. Paste strips or sheets of paper over key-holes, cracks, stove-pipe holes, and shut tightly all windows and doors.
4. Place a tub containing about two inches of water in the room. Put two bricks in the tub and on them place a tin pie-pan, or any old iron vessel. Into the vessel put three pounds of sulphur for every 1,000 cubic feet of room space, moisten with alcohol and set on fire. Immediately leave the room and tightly close the door. Sulphur candles may be bought from all druggists and may be safely used instead of proceeding as above.
5. At the end of twenty-four hours open the windows, top and bottom, and air the room until all odor of sulphur is gone. Take out the various articles, including carpet, and submit them to air and sunshine for several days.
6. Thoroughly clean the room, scrubbing all the wood-work with soap and water, and re-whitewash or re-calcimine the walls and ceiling. If walls are papered, have the paper removed and new paper put on.
7. In the event of death, the body must be wrapped in a sheet thoroughly soaked in odorless disinfectant (formula given below), and then placed in an air-tight coffin, *which is to remain in the sick room until removed for burial*. Burial must take place within twelve hours after death. A public funeral is forbidden. *The coffin must not be opened nor the remains again exposed under any pretext whatsoever*. Public hacks and carriages shall not be used as hearses.

DUTIES OF HEALTH OFFICERS AND PHYSICIANS.

Whenever a case of diphtheria occurs in a house, the head of the house or the attending physician shall report it at once to the health authorities. Placards shall be placed upon the house or premises by the health authorities announcing that diphtheria is there, the following form being recommended:

DIPHTHERIA.

No one allowed to enter or go out of
these premises without permission
of the Health Office.

\$5.00 FINE

FOR REMOVING THIS PLACARD.

STANDARD DISINFECTANTS.

For general use: Sunlight, fresh air, soap and water, thorough cleanliness, are the best disinfectants.

For special purposes the following solutions are good, simple and cheap:

STANDARD DISINFECTANT No. 1.

Dissolve chloride of lime of the best quality in pure water, in the proportion of six ounces to the gallon.

One quart of this solution for each discharge from a patient suffering with any contagious or infectious disease. Mix well and leave in the vessel for an hour or more before throwing into privy vault or water-closet. The same for vomited matter. For a very copious discharge, especially in cholera, use a larger quantity; and for solid or semi-solid matter, use the solution in double strength. Discharges from the mouth and throat should be received into a cup half full of the solution, and those from the nostrils upon soft cotton or linen rags, which should be immediately burned.

The chloride of lime must be of the best quality; poor chloride of lime is worthless.

STANDARD DISINFECTANT No. 2.

Dissolve corrosive sublimate, permanganate of potash and muriate of ammonia in pure water, in the proportions of two drachms each to the gallon.

Use for the same purposes and in the same way as No. 1. Equally effective, but slower in its action, so that it is necessary to let the mixture (disinfectant and infected material) stand about four hours before disposing of it. It is best to empty the mixture into a wooden pail and leave it for twenty hours, when it may be thrown into the vault or water closet, or into a hole dug in the ground for that purpose in some suitable spot. This solution is odorless, while the chloride of lime solution is often objectionable in the sick room on account of its smell.

This disinfectant is *highly poisonous*, and will *injure lead pipes* if passed through them in large quantities without free flushing.

STANDARD DISINFECTANT No. 3.

Dissolve four ounces of corrosive sublimate and one pound of sulphate of copper in one gallon of water.

Use this for disinfecting clothing and bed clothes. Add a teacupful of it to two gallons of water. Soak the clothes in it for two hours, then wring them out and boil them. This solution is poisonous, and must not be kept in metal vessels, nor poured into lead pipes without free flushing.

Solutions of corrosive sublimate should not be made or kept in metal vessels. A wooden tub, barrel or pail, or an earthen jar, should be used for such solutions.

Disinfection of Privy Vaults, Cesspools, etc.—When the excreta or discharges (not previously disinfected) of patients suffering with any contagious disease have been thrown into a vault, this becomes infected and dangerous. Disinfection should be resorted to as soon as the fact is discovered or even suspected.

Disinfectant No. 3, diluted one part to three of water, may be used in the proportions of one gallon of the diluted solution to every four gallons (estimated) of the contents of the vault. All exposed portions of the vault and woodwork should be thoroughly wet with the solution.

To keep a vault disinfected during the progress of an epidemic—or even a single case of contagious disease—sprinkle chloride of lime freely over its contents daily. Or if the odor of the chloride be objectionable, apply daily four or five gallons of *Disinfectant No. 2*, which should be made by the barrel for this purpose, and kept in a safe place, where children and animals can not get at it.

The epidemic and malignant disease circulars of the Board—embracing rules and regulations for the prevention and suppression of smallpox, of typhoid fever, of diphtheria and scarlet fever—may be obtained by addressing the Secretary.

Douglas C. Ramsey, M. D., President,
Mount Vernon, Ind.
L. L. Whitesides, M. D., Vice-President,
Franklin, Ind.
J. N. Hurty, M. D., Secretary,
Indianapolis, Ind.
John H. Forrest, M. D.,
Marion, Ind.
T. Henry Davis, M. D.,
Richmond, Ind.

1896.
INDIANA
STATE BOARD OF HEALTH.
HEALTH CIRCULAR No. 5.

Special Rules governing physicians and Health Officers when visiting persons sick of contagious and infectious diseases, and directing the proper conduct of quarantine. Passed October 6, 1896.

EXPLANATION.

It will be admitted that not a few practitioners of medicine are careless, and that there are some who do not understand or do not appreciate the care they should exercise in their own person when visiting patients sick with contagious and infectious diseases.

Quarantine, too, seems not to be thoroughly understood; for instances are not rare when the posting of a flag or red card constituted all that was done, the flag being relied upon as a fetish. In such instances the physician takes no precaution against infecting himself, neighbors call and return to their homes at will, and the members of the stricken household are not restrained. Under such circumstances, contagious diseases will surely be spread in all directions. The laity frequently ask, "How do doctors keep from spreading disease?" They do spread disease in some instances, and to prevent the carrying of contagion by physicians and others is the object of these rules. Example will materially aid in instructing the people, and so these rules carefully set forth the conditions under which practitioners shall visit patients when they know them to be sick with diphtheria, scarlet fever and other contagious and infectious diseases. The conditions imposed are not difficult to fulfill and are not burdensome, and even if they were, no objection could be reasonably advanced against them if they were really necessary. An instance may be given which will fully illustrate the need of these rules.

In a village smitten with diphtheria a health officer visited, with a local physician, one of the cases. A card was upon the door, and it was discovered that that constituted the quarantine. Two women and a young girl were within attending the sick child. One of the women was a neighbor who had kindly offered her aid, and she held the child in her arms, its head upon her shoulder.

From here this good woman was soon to return to her home to prepare the evening meal for her family. For depressing the tongue the same spoon had been used without washing or sterilizing since the beginning of the disease. The mother

of the child grasped the spoon by the infected handle and offered it to the visitor. A soiled handkerchief lay upon the bed. This was handed by one of the ladies to the other, who proceeded to wipe the mouth and nose of the child and then toss it onto the bed. With hands and clothes reeking with poison, these good women infected everything they touched. Flies were abundant and busily at work aiding in the transmission of the disease. The attending physician preferred to have the child upon his knees when he took its temperature and pulse. The drops of saliva which passed onto his coat sleeve were wiped off with his handkerchief, and he went forth to pay another visit. The health officer perceived a smile upon the face of his companion when, before entering the sick room, he removed coat, cuffs and hat, produced a clean, glossy linen duster and skull cap from a glazed hand bag, and donning the garments announced himself as ready to see the patient. Another smile was provoked when upon leaving the sick room a bowl of water was called for, the hands and face washed with the aid of a cake of carbolic soap taken from the bag, and a disinfectant freely used.

The above facts impelled the passing of the following rules, and it is to be hoped they will be obeyed to the letter, that humanity may be served and the medical profession honored.

The use of diphtheria antitoxin is recommended in all cases of diphtheria, and it is especially recommended that all persons who have been exposed to diphtheria be promptly immunized with it.

The justice and propriety of Rule 6 is plain when we remember it has been proved beyond any question that many simple red throats are really caused by the true diphtheria bacillus. A recent writer tells of a trained nurse who observed that wherever she went to nurse, diphtheria broke out. She had taken every precaution against carrying the disease, having had several Turkish baths, used antiseptics and made an entire change in her clothes, yet the disease followed her. Investigation showed her mouth to be alive with diphtheria bacilli. She was quarantined and given thorough antiseptic treatment. After the bacilli disappeared diphtheria did not again show itself in her track.

RULES.

RULE 1. When visiting patients known to be sick with small-pox, scarlet fever, diphtheria or other contagious or infectious disease, physicians shall clothe themselves in a specially provided clean linen duster, oil-cloth or rubber coat, and a tight-fitting cap made of silk, linen, oil-cloth or rubber. The cap shall well cover the hair. Before leaving the house, physicians shall cleanse hands and face with antiseptic soap and water, and use a disinfectant upon hands and face. The coat, cap, antiseptic soap, bottle of disinfectant, etc., shall be carried in a special glazed leather valise, together with a pad of cotton, which is to be kept wet with formaldehyde.*

*The disinfectant recommended is a 1 to 5,000 solution of corrosive sublimate, a 5 per cent. solution of carbolic acid or a 1 per cent. solution of lysol. A cake of sublimated or carbolic soap may be conveniently carried in a traveler's soap box. The cotton pad is kept in the case or bag to absorb the formaldehyde. This chemical is our greatest antiseptic and its vapor will destroy all germs.

It will be well to add to the above outfit a roll of paper napkins and a bundle of small flat pine sticks to be used as tongue depressers. The paper napkins are suggested because towels can not sometimes be found in the houses of the poor, and if they were found might be infected. Having one's own napkins gives perfect independence. The wooden tongue depressers may be whittled out of pine, or, better, obtain from seed dealers the flat pine markers for flower beds which gardeners use. They cost seventy cents per thousand.

The outfit here described may be obtained complete, or in parts, from the When Clothing Store, Indianapolis.

RULE 2. Physicians shall give full and explicit instructions to parents, nurses and attendants concerning every precaution to be taken against the spread of infectious diseases. When possible, patients shall be placed in a room which, for the time, shall not be entered by others than those who nurse, and only the physicians and nurses shall be admitted. Every article of tableware or of apparel used by the patient shall be sterilized or destroyed by fire as soon as possible. Pieces of old soft cloth shall be used for wiping the mouth and nose of the sick. They shall be used but once, and then immediately destroyed by burning, or sterilized by boiling for one-half hour or more in water.

RULE 3. Physicians shall promptly report to the health officer all cases of contagious or infectious diseases to which they are professionally called.

RULE 4. Health officers shall, upon receipt of any reliable information of a contagious or infectious disease, immediately flag the house and establish *rigid* quarantine, and shall distribute printed rules concerning the sanitary management of the household during the continuance of the quarantine.

RULE 5. When there is a doubt whether or not the disease is diphtheria, physicians and health officers having the case in charge shall send to the State Board of Health or to other competent authority for serum tubes, that cultures may be made and the case immediately decided. The work will be done without cost by the State Board of Health.

RULE 6. When diphtheria prevails in a community, it will be necessary to consider every case of sore throat diphtheria until the contrary is proved, and *rigid quarantine shall be sustained in mild as in severe cases.*

RULE 7. In all cases of death from diphtheria, membranous croup, scarlet fever and other contagious or infectious diseases the funeral shall be strictly private, and the corpse shall be buried within twelve hours after death. No public or church funeral shall be held, or any person permitted to enter the house containing the remains except the undertaker and his assistants, unless by permission of the county or local Board of Health or their officers. Health Boards and officers shall enforce this rule.

RULE 8. The room in which there has been a case of contagious disease dangerous to the public health must be immediately disinfected following the recovery of the sick or the removal of the remains, as follows, to wit: All surfaces should be thoroughly washed with a solution of corrosive sublimate of the strength of one part in 1,000 parts of water. The walls and ceiling, if plastered, should be brushed over with this solution, after which they should be whitewashed with a lime wash. Especial care must be taken to wash away all dust from window ledges and other places where it may have settled, and to thoroughly cleanse crevices and out-of-the-way places. After this application of the disinfecting solution, and an interval of twenty-four hours or longer for free ventilation, the floors and wood-work should be well scrubbed with soap and hot water, and this should be followed by a second more prolonged exposure to fresh air, admitted through open doors and windows. School books or books from a circulating library shall not be taken into or removed from any house during the prevalence of any contagious disease dangerous to the public health, and if such books have been in such houses during the prevalence of said diseases, they must be destroyed by the owner or library authorities, or be properly disinfected before being returned to schools or put in circulation. Health Boards and officers shall enforce this rule.

PENALTIES.

RULE 9. Any person or persons failing or refusing to comply with either or any of the foregoing rules, shall be subject to the penalties provided in section 9 of an act establishing a State Board of Health, passed February 19, 1891.

D. C. RAMSEY, M. D.,

J. N. HURTY, M. D., *Secretary.*

President.

A NUISANCE AT WEST LAFAYETTE.

BY J. N. HURTY, M. D., SECRETARY.

September 7, 1896, a letter was received from Dr. W. R. Moffatt, Health Officer of West Lafayette, Tippecanoe County, requesting the aid of the State Board in abating a nuisance caused by the bank of the L. E. & W. R. R. Answer was immediately made that the Secretary would visit the place on September 10.

It was found that the nuisance complained of was of long standing. It consisted of a stagnant slough, which did not exist prior to the filling up of the L. E. & W. R. R. trestle work, which, when the railroad was first built, supported the tracks over the river bottom. The slough was U shaped. The south arm was formed by the railroad embankment, the north by the main street levee, the closed end by the high ground upon which West Lafayette is built, and the open portion was bounded by the Wabash River. In flood times much of the water which collected in this area was prevented from returning to the river by the natural high banks, and the railroad bed prevented its original egress toward the south, where the natural low banks permitted it to run again into the river. That a nuisance was thus formed there is no doubt. But who was to blame? The railroad embankment undoubtedly kept the flood water from naturally draining away, but this had existed for almost twenty years without complaint or protest; and so it seemed that the town had accepted at least a portion of the responsibility.

From measures taken it was found possible to run a drain directly east to the river, which would have sufficient fall to empty the slough. This plan was adopted, and it was agreed that the cost should be equally divided between the L. E. & W. R. R., the owners of the land and the town itself. The work is now in progress.

DIPHTHERIA AT REDKEY.

BY J. N. HURTY, SECRETARY.

On September 9 a telegram was received from Dr. M. T. Jay, of Portland, Health Officer of Jay County, declaring that diphtheria was epidemic at Redkey, and asking the aid of the State Board of Health. A reply was made that the State Health Officer would visit Redkey September 11.

It was found upon arrival that the first case appeared in May preceding, and that there had been thirty cases and seven deaths to date. There was no Town Health Officer, as the Town Board had failed to appoint one. There was no one therefore to look after the health affairs of the town, nor to enforce sanitary measures. The President of the Town Board was waited upon, the seriousness of the situation discussed, and he was induced to call an immediate meeting of his Board. After explanations and argument, the Board appointed Dr. F. R. Stires to the position of Town Health Officer. He was instructed in his duties, and immediately proceeded to take the necessary steps to stay the further advance of diphtheria, and to put the town in proper sanitary condition. Success attended their efforts, for it was reported within twelve days that no new cases had developed and that the old ones had diminished.

DIPHTHERIA IN ORANGE COUNTY.

BY J. N. HURTY, M. D., SECRETARY.

On September 13 the following telegram was received:

WEST BADEN, IND., September 13.

Secretary State Board of Health, Indianapolis:

At a meeting of the citizens of this vicinity, now in session, it is found that malignant diphtheria in the neighborhood surrounding us is epidemic and the death rate increasing. Local authorities are unable or unwilling to cope with it. Your immediate presence is urgently requested.

LEWIS GRIGSBY,	JOHN A. RITTER,
L. L. SHIELDS,	J. A. FELKNER,
HENRY DICKEY,	G. W. SPEER,
R. A. KENNEDY,	E. B. RHODES,
A. L. DICKEY,	A. BURTON,
A. B. WOLFINGTON,	LEE W. SINCLAIR.

The next day after this was received, the Secretary arrived in West Baden. This place is in French Lick Township, which township contains no incorporated town or city. Dr. S. R. Lingle, County Health Officer, and Mr. Collins, Township Trustee, gave their hearty aid and support to all the plans proposed to stop the epidemic. It was found that there had been twenty deaths in the neighborhood and seventy-five or more cases. The Secretary rode with Dr. Lingle to several of the places where diphtheria prevailed, gave instructions to the stricken families and administered antitoxin in five instances.

Dr. Luckett, of French Lick, was appointed Deputy Health Officer of Orange County, with orders to give his attention to French Lick Township. Strict quarantine was established in every instance where the disease prevailed, physicians were ordered to promptly report all cases and to themselves take every care against carrying the disease. Physicians were also urged to use antitoxin freely, and Dr. Lingle was supplied with

a quantity from Indianapolis. Upon the advice of the State Health Office Dr. Lingle issued a "Special Health Circular," which read as follows:

HEALTH CIRCULAR.

Diphtheria is a dangerous disease.

Easily transmitted from one person to another.

All cases of sore throat should be considered dangerous.

Persons having sore throat should immediately call a physician.

Visit no sickness where they have sore throat.

Burn all clothes used in a case of diphtheria.

Be prompt to follow the instructions of this circular, and save yourself and neighbors trouble and perhaps sorrow.

J. N. HURTY,

S. L. LINGLE, M. D.,

Secretary State Board of Health.

Secretary County Board of Health, concurring.

This was posted throughout the stricken districts and certainly did much good. Within one week reports of new cases ceased and the epidemic was under control.

EASTHAVEN SEWAGE DISPOSAL.

BY J. N. HURTY, M. D., STATE HEALTH OFFICER.

On August 15, 1896, the following petition was received:

To the Honorable State Board of Indiana:

GENTLEMEN—The undersigned residents and freeholders in Wayne County, Indiana, respectfully represent to your honorable body that they are residing and owning property along a stream known as "Clear Creek," in said county; and that into said stream is discharged all the sewage from the "Eastern Indiana Hospital for the Insane," and also from "Earlham College," which sewage is large in amount and very offensive in character. Not only is the odor therefrom disagreeable and almost impossible to be endured, but they are dependent upon the fields along the bank of the stream for pasturage, and thus the stock is obliged to drink the polluted water, causing great liability to disease in any one using milk therefrom.

And we hereby petition your honorable body to take measures to afford us relief, and prevent these institutions from polluting the said stream.

JUNE 3, 1896.

JOHN R. BURTON,	HENRY TROUSE,
R. G. ZEISER,	ALICE L. DAVIS,
HOWARD M. DAVIS,	SARAH E. GILBERT,
ALICE DAUGHTERTY,	JOSEPH YAGER,
GEO. BUHL,	MRS. JOSEPHINE BUHL,
WM. SHUTE,	EARLHAM CEMETERY,
	(By L. D. Stubs.)
C. H. SPATZ,	J. C. CARMAN,
DAVID SUTTON,	W. A. HOWARD,
JOHN B. DOUGAN,	DORA G. SHILES.

Upon receipt of this, the following letter was sent to Dr. Hibberd, Health Officer of Wayne County, Indiana; to Dr. T. Henry Davis, member of the State Board of Health at Richmond, and to Dr. S. E. Smith, Medical Superintendent Eastern Indiana Hospital for the Insane.

INDIANAPOLIS, August 24, 1896.

DEAR DOCTOR—I inclose a copy of a petition which needs no explanation. I will visit Easthaven, Wednesday, August 26, and hope it will be your pleasure to join with me in an investigation into this matter.

Very respectfully,

J. N. HURTY,

Secretary.

Favorable replies were promptly received from each one of the gentlemen addressed, and so on August 26, 1896, the Secretary arrived at Easthaven, and, together with Dr. Smith, Superintendent, Dr. Hibberd, County Health Officer, and Dr. Davis, member of the State Board of Health, an inspection was made.

The Hospital furnishes about 60,000 gallons of sewage daily. This is conducted by vitrified sewer pipe to a lower level, distant 400 yards, where it is strained through straw placed in brick-lined pits, and then conducted into Clear Creek. The fall from the foundation of the main building to the creek is over forty feet. The straining through straw simply removes suspended matters, and the otherwise unpurified sewage drains into the creek, thereby polluting the little stream and threatening the public health.

There was but one conclusion, and this all agree to, namely, proper disposal of the sewage must be made. It is recommended by the State Board of Health that sewage filter beds be built.

The following estimate of the cost was made by Mr. H. L. Weber, City Engineer of Richmond :

ESTIMATE TO CONSTRUCT SEWERAGE SYSTEM FOR THE EASTERN INDIANA HOSPITAL FOR THE INSANE.

Storm sewer, 600 ft. 24-inch pipe.....	\$1,295 00
Excavation, 800 cubic yards.....	
Manholes, 3.....	
Interceptor, 1	
Two acres of ground for disposal beds.....	200 00
Underdrain, 10,000 ft.	6,469 00
Gate chambers, 6.....	
Inspection manholes, 32	
Channels in beds, 1,300 ft.....	
Automatic flush tanks, 1.....	\$7,964 00
Screen chambers, 1	
Sanitary sewers, 10-inch diameter, 1,500 ft.....	
Excavation, making beds, 7,000 cu. yds.....	
Gravel filling in trenches and surface of beds, 7,000 cu. yds.....	
Total.....	

The further sanitary inspection of the Eastern Hospital for the Insane developed the fact that the buildings were in the best possible sanitary condition. The cleanliness and order were perfect, evidencing conscientious and efficient management. One great defect in the Institution is the lack of proper facilities for the care of the sick, and the State Health Officer strongly recommends that it be remedied. This defect is clearly set forth in the following letter to Dr. Davis from Dr. Smith, Medical Superintendent:

RICHMOND, October 16, 1895.

Dr. T. Henry Davis, Member State Board of Health, Richmond:

DEAR DOCTOR—I beg to respectfully call the attention of the State Board of Health to a condition existing in this Hospital which makes it impossible for the management to comply with the rules of your Board in the matter of isolation of patients suffering from contagious and infectious diseases.

This Hospital, as you are aware, is constructed on the cottage plan and arranged in two departments, for the separation of the sexes. In the original and complete plan provision was made for the erection of two cottages, one in either department, with the essential features of small hospitals, to provide for patients suffering from acute diseases requiring special nursing and medical treatment. For lack of funds to complete the institution as originally planned, the Board of Commissioners saw fit to omit these hospital buildings and prepare all other cottages and buildings for occupancy, with the expectation that at no distant day the General Assembly would, by the appropriation of ample funds for the purpose, require this much-needed provision to be made.

The Hospital is now, however, closing its sixth fiscal year, and these cottages have not yet been erected, notwithstanding the urgent recommendations of the management.

Appreciating the necessity of the isolation of cases with tuberculosis and other infectious and contagious diseases liable to enter at any time, it was my purpose on becoming the chief medical officer of this Hospital more than five years ago to set apart for these cases a cottage in each department. The attempt was made, but the pressure for the admission of the urgent and acute insane became so great that the effort was abandoned. There are at present, in four separate wards, cases of advanced tuberculosis, exposing to infection approximately 120 other patients. The management is painfully sensible of this evil condition, but is unable to relieve it. By the exercise of good care, the introduction into the institution of other contagious and infectious diseases has been prevented, but the danger exists and may occur and be followed by the most serious results, in spite of all care and the existence of a most excellent sanitary condition.

In order to obviate such a calamity and to properly protect the helpless sick intrusted to the care of the State, the management will recommend to the next General Assembly the necessity of providing for the erection of two hospitals, one for either sex. These hospitals should be equipped with not less than thirty beds each and so arranged as to permit complete isolation from all other departments and at the same time some safe separation within the cottage itself. Here should be properly grouped patients suffering from acute disease, where special attention, in addition to isolation, may be given to nursing and medical treatment. Each should have ample verandas, a well-equipped special diet kitchen, an improved bath room, an operating and examining room, a small laboratory and in the basement a mortuary in connection with a pathological room. It should be most thoroughly constructed, and equipped in accordance with the most modern sanitary rules. Such cottages will cost for construction and equipment about \$22,500 each, or \$45,000 for the two.

In the light of our present knowledge of infectious diseases, this management feels that it can not discharge its duty to the unfortunates for which it is responsible without urgently recommending to the proper authorities at the proper time provision for these additions.

Your attention is thus formally called to this need and your assistance solicited in its behalf because it is a matter of public health, and consequently falls within the purview of the statute defining the duties of your Board. Mindful of the progressive spirit manifested lately by your Honorable Board, and in all things pertaining to the public health, and your apparent determination to guard it in every possible way, this matter is respectfully submitted for your consideration.

Yours respectfully,

S. E. SMITH,
Medical Superintendent.

LETTER TO COUNTY SECRETARIES.

INDIANAPOLIS, July 1, 1896.

DEAR DOCTOR—You are doubtless aware that our present health law is very imperfect. It is inadequate and not up to the times. A new one is needed to place Indiana abreast of other States, and to enable the health authorities to serve the people as they should be served, according to the laws of modern sanitary science. The facts have been formally recognized in resolutions, unanimously passed, at the last meeting of this Board.

This letter is to inform you of our intention to try to better matters and to ask your aid. A committee is now studiously at work drawing up the points for a new law. So soon as their work is finished, two prominent lawyers here, who have volunteered their services, will give the matter legal form; the proposed law will then be printed and distributed to the physicians and papers of the State. This effort is simply to do that which is right. No selfish ends are to be subserved; and every one will be asked to help, that the commonwealth may be benefited. The first section of the new law will put the present members of the State Board of Health out of office. We will all further declare that we will not be candidates for the new State Board, thus preventing all sneers and silencing uncharitable criticisms. In the interests of good government we shall also recommend to the appointing power that no applicant for appointment on any of the new Boards to be controlled by the proposed law shall be considered, as it is certainly true that this office should seek the man.

I give you an outline of some of the features of the new law:

The new State Board of Health shall consist of seven members, four of them to be physicians, one lawyer, one engineer, one business man. Appointed by the Governor. No pay. Only expenses paid. Meet each quarter. Duties and powers to be carefully defined. The idea in associating these laymen with the physicians in the constitution of the Board is to make it as representative as possible of all who are interested in the public health. Their advice and co-operation would manifestly be very useful to the medical members; as, for example, has been instructively illustrated by the practical workings and results of the New York State law.

State Health Commissioner—Shall be appointed by the Board. Shall be a capable physician who has made a specialty of the branch of medicine known as sanitary science and hygiene. He shall be experienced in sanitary chemistry and bacteriology. Shall be proficient in vital statistics. Term four years. Shall be Secretary and executive officer of the Board. Salary, \$3,000. Duties and powers to be carefully defined.

A sanitary laboratory shall be established where all necessary sanitary analyses and bacteriological examinations and all health work may be done for the people without charge. A modern Health Board without a sanitary laboratory in charge of skilled and learned specialists would be almost helpless. Certainly it would be an anachronism.

County Health Boards—Shall consist of two physicians and a lawyer or business man. Appointed by the Commissioners. One of the physicians to be made Secretary and County Health Officer. Shall meet once a month. Secretary to be paid \$10 per year for each 1,000 of population, except in counties of over 100,000; salary in these not to exceed \$1,000. The other two members to receive no salary. Expenses paid by the county. Duties and powers to be carefully defined.

These outlines are, of course, incomplete. They are thus presented now merely to give you an understanding of the plan and to enlist you in the cause. Your thoughts and suggestions on the subject are most earnestly solicited. All students of preventive medicine can demonstrate to the laymen that several millions of dollars are wasted annually in Indiana in disease and deaths that need not have been. These millions can be saved, and with them the heartaches that attend this preventable sickness and death, if we but had a proper health law, enforced by good men. We hope that you will promise your aid and that you will heartily put forth every effort to further the cause. We ask you to have this letter published in your local paper and request the editor to give the matter his serious

attention and kind assistance. Also make it known that all citizens are urged to join in this effort to do something that is not only good for the greatest number, but good for all.

Please let us hear from you. Very respectfully yours,

J. N. HURTY,
Secretary.

EVANSVILLE, August 6, 1896.

Small-pox at Martin's Station, on P., D. & E. Railroad, Vanderburgh County Notice dated August 6, 1896. Patient, Mrs. John F. Goebel; family of eight; four adults, four children. All were vaccinated; also all the people in the village, thirty-six in all. Trains ordered not to stop.

J. C. McCLURKIN, M. D.,
Secretary County Board of Health.

LETTER TO SECRETARIES OF STATE BOARDS OF HEALTH.

INDIANAPOLIS, August 16, 1896.

DEAR DOCTOR—I have to report a case of small-pox at Martin's Station, Vanderburgh County, this State, in the person of a woman. All necessary precautions have been taken to prevent the spread of the disease. Very truly yours,

J. N. HURTY,
Secretary.

LETTER TO DELINQUENT COUNTY SECRETARIES.

INDIANAPOLIS, August 31, 1896.

DEAR DOCTOR—Your reports for the quarter ending June 30, 1896, have not yet been received. It is very necessary that we have these reports in as soon as possible, and we rely on you to furnish them. You have the power to collect these statistics, and we urge you to use that power and report to us speedily.

We also ask that you put forth special effort in getting full reports for the last quarter of this year, which closes September 30. This Board must report to the people more perfect vital statistics, and so we are compelled to require all County Health Officers to put forth greater exertions. We fully appreciate the trouble you have in getting physicians to report to you, and suggest that you notify by card or other means every physician in your county that the law commands reports and requires the County Health Officer to see to it that all births, deaths and communicable diseases are promptly returned.

We hope for your hearty approval in this matter, and will thank you for all the information you can give.

Very respectfully,

J. N. HURTY,
Secretary.

EXCLUSION BY CHICAGO HEALTH DEPARTMENT OF MILK FROM CROWN POINT, LAKE COUNTY, INDIANA.

REPORT BY J. N. HURTY, M. D., STATE HEALTH OFFICER.

On Thursday, September 24, 1896, the following telegrams were received :

CHICAGO, ILL., September 24.

Dr. J. N. Hurty, Secretary State Board of Health, Indianapolis, Ind. :

An outbreak of typhoid fever in this city has been traced to infected milk from Crown Point and vicinity. I have ordered all milk from there to be excluded from Chicago or destroyed until you pronounce it safe. This applies to every shipper. On receipt of a certificate from you as Secretary of the Indiana State Board that the milk product of any given shipper is free from danger of conveying typhoid infection, I will remove the restriction as to such shipper.

WM. R. KERR,
Commissioner of Health.

CROWN POINT, September 24, 1896.

J. N. Hurty, M. D., Secretary Indiana State Board of Health :

Chicago has unjustly excluded the milk from this county. We ask the immediate investigation and aid of the State Board of Health.

W. B. BLACKSTONE, M. D.,
Secretary Lake County Board of Health.

No reply was made to Commissioner Kerr, but the following telegram was immediately forwarded to Dr. Blackstone :

INDIANAPOLIS, September 24, 1896.

Dr. W. B. Blackstone, Health Officer, Crown Point, Ind. :

I will visit you Friday afternoon, September 25.

J. N. HURTY, M. D.,
Secretary.

On Thursday night, September 24, I left for Chicago, arriving there Friday morning at 7:30. At the Chicago Health Department I received copies of the reports of G. W. Washburn, M. D., Sanitary Inspector. Their contents are given herewith :

197 EAST FORTY-SEVENTH STREET, CHICAGO, September 19, 1896.

E. Garrott, M. D. :

DEAR DOCTOR—Upon investigation of the typhoid cases reported to me yesterday from the Health Department, I find the following :

*Case 1.**—6404 Champlain Avenue, Mr. Cameron, sick two weeks; milkman is Follette, 5639 Armour Avenue; ice from Hyde Park Ice Co. He has been removed to the Chicago Hospital. No one at home. Got information from a neighbor.

Case 2.—6324 Champlain Avenue, Mr. Woodward, sick two weeks; milkman, Follette at present, but was taken ill at Forty-second and Wabash, where he had milk from private cow. Is accustomed to drinking hydrant water without being boiled or filtered.

Case 3.—6330 Champlain Avenue, Mrs. Brennan, sick three weeks; milkman, Follette; no ice. Is accustomed to hydrant water without boiling or filtering.

Case 4.—6338 Champlain Avenue, Cummings, boy and uncle, sick three weeks; milk from Follette; ice from Norton Lake; water boiled.

Case 5.—6319 Champlain Avenue, Mrs. Coria, sick three days; milk from Follette; ice from Northern Lake Company; water from hydrant without boiling or filtering.

Alley in rear of these houses in good condition; land dry and houses sanitary. There is no accounting for epidemic, or possibly hydrant water. Yours very truly,

G. F. WASHBURN, M. D.

(Ordered Washburn to proceed to Crown Point, Ind., it being probable that typhoid-infected milk was the cause.—F. W. R.)

CHICAGO, September 22, 1896.

Hon. Wm. R. Kerr, Commissioner of Health:

DEAR SIR—In tracing back the typhoid epidemic in a certain portion of Englewood I find the possible, if not probable, source of infection down at Crown Point, Ind. I visited the farm where the milk comes from that has been distributed to the families afflicted and with the following result: George Emerling, who supplies C. L. Follette, the milkman, direct from the farm, is one of several farmers at Crown Point who are visited with typhoid in their own families. Emerling's eighteen-year-old daughter was taken down with it sixteen days ago at a distance of twenty-five miles from the farm. She was removed to her home just one week ago and is now in a critical condition at the farm-house. The cows are watered from a well which is 100 feet from the privy vault. Emerling assured me that the cattle never had any other water. A sample of this water is now with the City Bacteriologist.

E. Wild has a farm adjoining Emerling's. His wife died recently of typhoid fever, and his daughter is down with the same disease. He has not shipped any milk for three weeks, but prior to that he sent a can daily to Follette of Chicago. I brought a sample of the milk for examination. The cows occasionally drink from a pond, but I could not get a sample of this water, I regret to say, on account of the limited time and distance. There is a stream running between these two farms, but I was assured that the cows never drank from it. I also brought a sample of this water. Wild's cooler is supplied with water from a deep well, and there is no vault within 100 feet. I consulted their doctor and learned that typhoid has been and still is quite prevalent among the farmers, and nearly all of them send milk to Chicago. They account for the epidemic on the ground of a long spell of hot weather and decaying fruit and vegetables. I asked the doctor if he prohibited them from distributing milk when they had typhoid in their families, and he said he had nothing to do with that. All he had to do was to report it to the Board of Health, which consists of a Secretary. The latter reports it to In-

* Designating these instances as Cases 1, 2, 3, 4 and 5 was done by the Indiana Secretary.

dianapolis, and that ends it. The farmers I visited were told by me not to ship any more milk at present, and they said they wouldn't; still, I think they had better be watched to make sure. Wild's other customer in Chicago is Henry Stuhlmacher. Yours truly,

G. F. WASHBURN, M. D.

September 23, 1896.

Mr. A. J. Brown, Milk Agent, Panhandle Road, Freight Office, No. 101 Clinton St., City:

DEAR SIR—An inspection of Crown Point, Ind., shows typhoid fever infection on several farms from which milk is supplied to this city, and a number of cases, with one death from this cause, have been positively proven.

You are, therefore, hereby authorized to refuse to receive shipments of milk from that place for distribution in Chicago until further notice from this Department.

Respectfully,

WM. R. KERR,
Commissioner of Health.

September 23, 1896.

Mr. Cass L. Kennicott, City Chemist, in charge of Milk Division:

DEAR SIR—Inclosed please find copy of notice served on Milk Agent of the Panhandle Road concerning milk from Crown Point, Ind.

You will detail an Inspector to see that this is carried into effect. Under no circumstances will you allow milk from Crown Point to be distributed in Chicago until that place is pronounced free from typhoid infection. If shippers persist in sending milk into this city from that point your Inspector will see that it is carbolized and emptied into the sewer or ditch as soon as it enters the jurisdiction of the city, that is, within one mile of the city limits.

Respectfully,

WM. R. KERR,
Commissioner of Health.

September 23, 1896.

J. W. Scott, M. D., Secretary State Board of Health, Springfield, Ill.:

DEAR SIR—The investigation of a recent outbreak of typhoid fever in this city shows conclusively that it was caused by typhoid-infected milk from Crown Point, Ind. Typhoid fever exists on at least two of the Crown Point farms from which milk has been shipped to Chicago.

I have taken the necessary steps to prevent any further distribution of milk from Crown Point, until that place is pronounced, by competent authority, free from infection and its milk product safe for use.

I would be glad to accept, as such authority, yourself or the Secretary of the State Board of Health of Indiana, and presume that you will communicate with the latter official so that he may take necessary action in the premises.

While my paramount duty is the protection of the health of Chicago, I desire to do this with as little interference with business interests as possible and beg you to say to Dr. Hurty that I will remove this restriction as soon as advised that it will be safe to do so.

Very respectfully,

WM. R. KERR,
Commissioner.

It seems proper to give at this point my analysis of the above evidence, as the study of the same does not seem to warrant the conclusion reached by the Chicago health authorities, namely, that this outbreak of typhoid fever was caused by milk from Crown Point, Indiana, and if it was not very probable that the milk was the cause, then there was no warrant for the order of exclusion.

Case 1.—Comment: Information was from a neighbor. This is bad, for to sustain so strong a conclusion as made by the Chicago Health authorities, direct testimony only should have been considered. No assurance that Mr. Cameron drank milk. No statement as to whether or not he drank the polluted Chicago water.

Case 2.—Comment: By the statement it is shown that Mr. Woodward was taken ill away from the place where now reported. He drank milk before the attack from a "private cow." Drank raw polluted water. Mrs. Woodward makes oath that she "has not used Follette's milk exclusively, but at odd times has purchased milk of other dealers."

Case 3.—Comment: Drank raw polluted hydrant water. Not shown that Mrs. Brennan drank milk. James Brennan makes oath that "he has not used his (Follette's) milk exclusively, but from time to time has purchased milk of other dealers."

Case 4.—Comment: "Boy and uncle" drank raw water at home. Did they do so away from home? Not shown that they drank milk.

Case 5.—Comment: Drank raw polluted hydrant water. Mrs. Corrie makes oath that "she has never had typhoid fever, nor has any member of her family had typhoid fever within the past year." Not shown that she drank milk.

I consider it important in tracing typhoid infection, that it be determined positively whether or not the person who is sick was a milk drinker or used it in coffee. More than one experience in Indianapolis may be related where the testimony pointed strongly to milk as the source of the disease, but it developed that the patients did not use milk even in coffee.

In the report of Dr. Washburn, dated September 22, 1896 (copy above), we find an account of a visit to the farm of Geo. Emerling, near Crown Point. Mr. Emerling, as shown in his

affidavit herewith appended, denies specifically the statements of Dr. Washburn. Dr. Blackstone also, in affidavit herewith appended, denies that typhoid now exists at Emerling's, and has not existed there for over eighteen months.

Dr. Washburn's account of farm of E. Wild is found to be true in every particular.

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss:

Charles T. Follette, being first duly sworn, deposes and says that he is a milk dealer doing business in the city of Chicago, at No. 5693 Armour Avenue; that within the past six months and over this affiant has sold milk to Mary E. Corrie, of 6319 Champlain Avenue; Anna R. Woodward, 6324 Champlain Avenue; Mr. and Mrs. Brennan, 6330 Champlain Avenue, and Mrs. Cameron, 6404 Champlain Avenue; that this affiant knows of his own knowledge that all of said parties, except Mr. Cameron, have used and purchased milk of other dealers besides this affiant within said time and prior to two weeks ago, and particularly during the past two months, that Mrs. Cameron has stated, has said to affiant that she has used milk of other dealers within said period of six months, and particularly during the last two months.

That this affiant has never had any complaint made of the quality of the milk sold by him prior to a week or ten days ago, when an attack was made on him in the newspapers of Chicago.

And further affiant saith not.

CHARLES L. FOLLETTE.

Subscribed and sworn to before me this 28th day of September, A. D. 1896.

[SEAL]

ADAM LANG,
Notary Public.

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss:

Mary B. Corrie, being first duly sworn, deposes and says that she resides at No. 6319 Champlain Avenue, in the city of Chicago, County of Cook, and State of Illinois; that she is acquainted with Charles L. Follette, a milkman, of No. 5639 Armour Avenue, Chicago; that she has purchased milk of the said Follette for about one year last past, and is still buying milk of the said Follette; that she has never found any complaint to make of the quality of said milk so purchased; that she has never had typhoid fever within the past year. And further affiant saith not.

MARY B. CORRIE.

Subscribed and sworn to before me this 28th day of September, A. D. 1896.

[SEAL]

ADAM LANG,
Notary Public in and for Cook County, Ill.

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss:

Mrs. James Brennan, being first duly sworn, deposes and says that she resides at No. 6330 Champlain Avenue, in the city of Chicago, County of Cook, and State of Illinois; that she is acquainted with Chas. L. Follette, a milk dealer of 5639 Armour Avenue, Chicago; that she has been buying milk of the said Follette for one

year last past; that she has not used his milk exclusively, but from time to time has purchased milk of other milk dealers, among whom being the Twin Springs Dairy Company, of Fiftieth and Wabash Avenue; a Mr. Hickey, a milk dealer of St. Lawrence Avenue, south of Sixty-fourth Street; a Mr. McCann, a milk dealer of Indiana Avenue, south of Twenty-sixth Street, Chicago. And further affiant saith not.

MRS. JAMES BRENNAN.

Subscribed and sworn to before me, this 28th day of September, A. D. 1896.

[SEAL]

CHAUNCY G. SMITH,

Notary Public in and for Cook County, Ill.

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss:

Anna R. Woodward, being first duly sworn, deposes and says that she resides at No. 6324 Champlain Avenue, in the city of Chicago, County of Cook, and State of Illinois; that she is acquainted with Charles L. Follette, a milk dealer of 5639 Armour Avenue, Chicago; that she has been buying milk of the said Follette for about six months past; that she has not used his milk exclusively, but at odd times has purchased milk of other dealers, among whom being the Twin Springs Dairy Company, of Fiftieth and Wabash Avenue, Chicago, and within the past six weeks has used milk furnished by Wanzer & Sons, milk dealers, in said city of Chicago. Also purchased milk of Borden Co., Chicago.

ANNA R. WOODWARD.

Subscribed and sworn to before me, this — day of September, A. D. 1896.

[SEAL]

ADAM LANG,

Notary Public in and for Cook County, Ill.

CROWN POINT, IND., September 26, 1896.

I, George Emerling, do testify that I am Superintendent of the Poor Farm in Lake County, Ind. My family consists of myself, three daughters and two sons, all living with me. My daughter Barbara is now convalescent from a mild attack of lung fever. My daughter Tilly is now convalescent from a mild attack of remittent fever. No typhoid has existed on this farm for over one year and a half, and the case we had then was brought here sick. We ship four cans of milk to Chicago daily. We have twenty-five cows all well and healthy. My daughters Barbara and Tilly have not been off the farm for over twelve hours at one time in two years. The statement made by G. F. Washburn, M. D., that "Emerling's eighteen-year-old daughter was taken down with it (typhoid) sixteen days ago at a distance of twenty-five miles from the farm," is not true in any particular. Another statement by said Washburn, that "the cows are watered from a well which is 100 feet from the privy vaults," is false. The cows are watered from a well ninety-two feet deep, which is in a grove one-half mile from any house, barn or privy.

GEORGE EMERLING,
Superintendent.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me this 26th day of September, 1896.

[SEAL]

ARTHUR H. GRIGGS,
Notary Public.

CROWN POINT, IND., September 26, 1896.

I, J. N. Hurty, State Health Officer of Indiana, do testify that the Poor House and Farm of Lake County, Ind., Geo. Emerling, Superintendent, is in every way in first-class sanitary condition. The water I believe to be good, because it is from a well about sixty-five feet deep, and the trend of the ground is away from it in every direction. This water is used for washing and rinsing the milk cans. From personal examination I can state that no typhoid exists at this farm.

J. N. HURTY,

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Secretary.

Subscribed and sworn to before me this September 26, 1896.

[SEAL]

ARTHUR H. GRIGGS,

Notary Public.

CROWN POINT, IND., September 29, 1896.

To Whom It May Concern:

This is to certify that I am Health Officer of Lake County and am also attending physician at the Almshouse of said county. I have been thoroughly acquainted with every case of sickness originating at or received into the Almshouse for treatment. During the past eighteen months there has not been a single case of typhoid at this institution.

W. B. BLACKSTONE.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Personally appeared before me this 29th day of September, 1896, Dr. W. B. Blackstone and acknowledged the execution of the within report.

[SEAL]

GEO. M. EDER,

Clerk.

CROWN POINT, IND., September 26, 1896.

I, E. Wild, living on a farm of eighty acres about three miles from Crown Point, do testify that my wife died of typhoid fever on September 11, 1896, and that my daughter died of the same disease September 25, 1896. I further testify that I have not shipped any milk to Chicago since August 31. On that day I shipped one can.

E. WILD.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me this 26th day of September, 1896.

[SEAL]

ARTHUR H. GRIGGS,

Notary Public.

CROWN POINT, IND., September 26, 1896.

I, J. N. Hurty, Health Officer of Indiana, do testify that the house and dairy of E. Wild, three miles from Crown Point, is in very bad sanitary condition. He has been ordered not to ship or sell any milk or butter until his premises have

been put in sanitary condition and all danger of typhoid infection absolutely removed, and not then until the County Health Officer gives his special permit.

J. N. HURTY.

STATE OF INDIANA, } ss:
COUNTY OF LAKE, }

Subscribed and sworn to before me this September 26, 1896.

ARTHUR H. GRIGGS,
Notary Public.

SUMMARY.

In the reports of Dr. Washburn we find six cases of typhoid fever reported from five houses in the same neighborhood.

Upon analysis, it appears in every instance save one, the fourth, the statements made do not even point to milk as the probable source of the disease. The fifth case must be entirely rejected because, as shown by the affidavit of Mrs. Corrie, no typhoid exists at her house. Inasmuch as in the fourth case the water was boiled at home, there is some reason to suspect the milk. The suspicion must, however, be light, for it is not shown that the patients did not drink raw, polluted hydrant water away from home. Further, it is not shown that they drank milk or used it in tea or coffee. The damaging report against Emerling must not be considered, because of the refuting affidavits given. The only evidence pointing to Crown Point milk as the source of infection was that concerning E. Wild. Mrs. Wild was taken with typhoid fever the last week in August and died September 11. The last shipment of milk from Wild's farm was made August 31, therefore no infection could have reached Chicago from that source subsequent to that date. It is true, however, that Wild's milk possibly carried infection prior to August 31, and there is a very remote possibility that the Champlain Avenue cases were caused by it. The raw, polluted hydrant water must not be overlooked as the more probable cause.

At Crown Point I made personal inspection of five dairies. My sworn statement concerning E. Wild's and George Emerling's are given above, and herewith is given the sworn statements of William Knopf, George Knopf and J. E. Fraas concerning themselves, and mine concerning the sanitary conditions of the three dairies.

In this connection the sworn statement of Dr. W. B. Blackstone is given concerning fourteen dairies.

These nineteen dairies are all that ship milk from Crown Point.

CROWN POINT, September 26, 1896.

I, J. E. Fraas, do testify that I am a dairyman, living two miles from Crown Point, Indiana. I own twenty cows and send daily to Chicago about four cans of milk. The cans hold eight gallons each. I have lived on this farm fifteen years, and no typhoid has been known here in that time. There are six in my family, all well and hearty.

JOHN E. FRAAS.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me this 26th day of September, 1896.

[SEAL]

ARTHUR H. GRIGGS,
Notary Public.

CROWN POINT, IND., September 26, 1896.

I, J. N. Hurty, State Health Officer of Indiana, do testify that the dairy of J. E. Fraas, about two miles from Crown Point, Ind., is in first-class sanitary condition. There is no sickness in Mr. Fraas' family nor among his stock.

J. N. HURTY,
Secretary.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me this September 26, 1886.

ARTHUR H. GRIGGS,
Notary Public.

CROWN POINT, IND., September 26, 1896.

I, Wm. Knopf, do testify that my dairy is about three miles from Crown Point, Ind. I own six cows, all healthy and well. I have two in my family, my wife and myself. There has never, to my knowledge, been a case of typhoid on my farm. I ship one can of milk to Chicago daily.

WM. KNOPF.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me this September 25, 1896.

ARTHUR H. GRIGGS,
Notary Public.

CROWN POINT, IND., September 26, 1896.

I, J. N. Hurty, Health Officer of Indiana, do testify that, although no typhoid fever or other sickness now exists or has been at the dairy of Wm. Knopf for some years past, the milk house, cow barn and surroundings are in bad sanitary condition, and that he has been ordered, under pain of prosecution, not to ship milk to Chicago, nor to sell the same anywhere, until all unsanitary conditions are completely abated, and not then until a special permit has been given by W. B. Blackstone, M. D., County Health Officer.

J. N. HURTY,
Secretary.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me this 26th of September, 1896.

ARTHUR H. GRIGGS,
Notary Public.

CROWN POINT, IND., September 26, 1896.

I, George Knopf, do testify that my dairy is about three and a half miles from Crown Point. I have sixteen cows, all healthy and well, and send to Chicago daily about four cans of milk. My family consists of three girls and one boy. I have had no sickness in my family for three years.

GEORGE KNOPF.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me, this 26th day of September, 1896.

ARTHUR H. GRIGGS,
Notary Public.

CROWN POINT, IND., September 26, 1896.

I, J. N. Hurty, State Health Officer of Indiana, do testify that the dairy of George Knopf, about three and a half miles from Crown Point, is in fair sanitary condition. Every member of his family is at this time in good health.

J. N. HURTY,
Secretary.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me this 26th day of September, 1896.

ARTHUR H. GRIGGS,
Notary Public.

CROWN POINT, IND., September 26, 1896.

I, W. B. Blackstone, M. D., Health Officer of Lake County, Ind., do testify that the following-named dairymen of Lake County, have not now, and have not had for a period of five years past, any typhoid fever at their respective places:

Chas. Krohn,	Angus Sanmacker,	Aug. Baltz,	Dol. Sherman,
J. Waltz,	H. F. Meyers,	Chris. Hirricks,	Wm. Schwucho,
John Schier,	Jos. Bohling,	Fred Main,	C. M. Baker,
Adam Popp.			

I further testify that I have personally inspected the dairies belonging to the above-named citizens and find them in excellent sanitary condition.

Their cattle are all well and healthy, and I believe their water to be pure and wholesome.

W. B. BLACKSTONE, M. D.,
Health Officer, Lake County, Ind.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me, this 26th day of September, 1896.

ARTHUR H. GRIGGS,
Notary Public.

Two days were consumed in gathering and considering all that has been specifically set forth above; and on account of it I felt warranted in sending the following telegram to Health Commissioner Kerr at Chicago, and in issuing the appended certificate.

DISPATCH SENT SEPT. 26, 1896.

To Wm. R. Kerr, Health Commissioner, Chicago:

Dr. Blackstone, Health Officer of Lake County, Ind., and myself have made sanitary inspection of every dairy that ships milk to Chicago by the Erie R. R. We find all but two to be free from typhoid, and in first class sanitary condition. One of these two is free from any sickness, but is unsanitary; the other is very unsanitary and has typhoid. Both have been put under close surveillance and the milk and butter condemned. No milk from the typhoid dairy has been shipped to Chicago since Aug. 31.

This fact almost precludes the probability that typhoid infection has reached Chicago by milk from this point. You are officially assured that from this date no milk that is tainted with suspicion will be shipped on the Erie R. R. from Lake County. Please raise present quarantine.

J. N. HURTY, M. D.,
Secretary Indiana State Board of Health.

CROWN POINT, IND., Sept. 26, 1896.

This is to certify that every dairy in Lake County, Ind., shipping milk by the Erie R. R., has been inspected and all but two been found in good sanitary condition and free from any sickness.

The dairy of E. Wild, where typhoid exists, has not shipped milk since Aug. 31. The suspicious dairies have been closed and their milk condemned until such time as they may properly be again allowed access to the market.

The milk shipped from this county by Erie R. R. from this date will be free from any infection and will be pure and wholesome.

J. N. HURTY, M. D.,
Health Officer of Indiana.

Upon my arrival at home, Monday Sept. 29, the following letter from J. W. Scott, M. D., Secretary Illinois State Board of Health, was found awaiting me.

SPRINGFIELD, September 24, 1896.

J. N. Hurty, M. D., Secretary Indiana State Board of Health, Indianapolis, Ind.:

DEAR DOCTOR—Enclosed please find copy of the letter received this day from Wm. R. Kerr, Commissioner of Health, Chicago. You will see by this letter, that it is the opinion of the Commissioner, after proper investigation, that typhoid fever has been communicated to Chicago through the milk supply received from Crown Point, Ind. That the Commissioner has placed a restriction on the distribution of milk from that point until he is assured, by proper authority, that the supply is free from infection. Such assurance should come to the Commissioner through you officially, and I have no doubt that you will investigate the matter, and take such steps as will remove the danger, and inform the Commissioner of your action in the matter.

Very truly yours,

J. W. SCOTT, M. D.,
Secretary.

CHICAGO, ILL., September 23, 1896.

J. W. Scott, M. D., Secretary State Board of Health, Springfield:

DEAR SIR—The investigation of a recent outbreak of typhoid fever in this city shows conclusively that it was caused by typhoid infected milk from Crown Point, Ind. Typhoid fever exists on at least two of the Crown Point farms from which milk has been shipped to Chicago.

I have taken the necessary steps to prevent further distribution of milk from Crown Point until the place is pronounced by competent authority free from infection, and its milk product safe for use.

I would be glad to accept as such authority yourself or the Secretary of the State Board of Health of Indiana, and presume that you will communicate with the latter officially, so that he may take necessary action in the premises.

While my paramount duty is the protection of the health of Chicago, I desire to do this with as little interference with business interests as possible, and beg you to say to Dr. Hurty that I will remove this restriction as soon as advised that it is safe to do so.

Very respectfully,

[SIGNED.]

WM. R. KERR,
Commissioner.

The answer to Dr. Scott is herewith given, and also report in form of two letters to Health Commissioner Kerr, of Chicago:

INDIANAPOLIS, September 29, 1896.

J. W. Scott, Secretary Illinois State Board of Health, Springfield:

DEAR DOCTOR—I have your letter of September 24th, inclosing document which was sent to you by Hon. Wm. R. Kerr, Commissioner of Health, Chicago. Prior to the receipt of your letter I had received a telegram from Commissioner Kerr apprising me of the fact that they had excluded the milk from Crown Point, Lake County, Indiana. I immediately visited Chicago, and called upon the Health Department. They showed me every courtesy, and gave me a copy of their written evidence from which they had drawn their conclusions.

J. F. Washburn, M. D., a City Health Inspector, had reported six cases of typhoid fever within a short distance of each other, upon Champlain Avenue. From the testimony gathered by Dr. Washburn it was concluded that these cases received their infection from Crown Point milk. Dr. Washburn visited Crown Point and made report as follows:

CHICAGO, September 22, 1896.

Hon. Wm. R. Kerr, Commissioner of Health:

DEAR SIR—In tracing back the typhoid epidemic now prevalent in a certain portion of Englewood, I find the possible if not the probable source of infection down at Crown Point, Indiana. I visited the farm where the milk comes from that has been distributed to the families afflicted, and with the following results:

George Emerling, who supplies C. L. Follette, the milkman, direct from the farm, is one of several farmers at Crown Point who are visited with typhoid in their own families. Emerling's eighteen year old daughter was taken down with it sixteen days ago at a distance of twenty-five miles from the farm. She was removed to her home just one week ago, and is now in a critical condition at the farm house. The cows are watered from a well which is 100 feet from the privy vault. Emerling assured me that the cattle never had any other water. A sample of this water is now with the City Bacteriologist.

E. Wiid has a farm adjoining Emerling's. His wife died recently of typhoid fever, and his daughter is down with the same disease. He has not shipped any milk for three weeks, but prior to that he sent a can daily to Follette, at Chicago. I brought a sample of the milk for examination. The cows occasionally drink from a pond, but I could not get a sample of this water, I regret to say, on account of the distance and limited time. There is a stream running between these two farms, but I was assured that the cows never drank from it. I also brought a supply of this water. Wild's cooler is supplied with water from a deep well, and there is no vault within 100 feet. I consulted their doctor and learned that typhoid has been and still is quite prevalent among the farmers, and nearly all of them send milk to Chicago. They account for the epidemic on the ground of a long spell of hot weather and decaying fruit and vegetables. I asked the doctor if he prohibited them distributing milk when they had typhoid in their families, and he said he had nothing to do with that. All he had to do was to report it to the Board of Health, which consists of a Secretary. The latter reports it to Indianapolis, and that ends it. The farmers I visited were told by me not to ship any more milk at present, and they said they wouldn't. Still I think they had better be watched to make sure. Wild's other customer in Chicago is Henry Stulmacher.

Yours truly,

G. F. WASHBURN, M. D.

Permit me to review the report of Dr. Washburn. The comments are by myself:

FIRST CASE. "No. 6404 Champlain Avenue, Mr. Cameron sick two weeks; milkman is Follette, 5639 Armour Avenue; ice from Hyde Park Ice Company. He has been removed to the Chicago Hospital. No one at home. Got information from a neighbor."

Comment. That the information was from a neighbor. No one at home. Why conclude from this that the case was typhoid? No assurance that Mr. Cameron drank milk. No statement as to whether or not he drank the polluted Chicago water.

SECOND CASE. "No. 6324 Champlain Avenue, Mr. Woodward sick two weeks; milkman Follette, at present, but was taken ill at Forty-second and Wabash, where he had milk from private cow. Is accustomed to drink hydrant water without being boiled or filtered."

Comment. That Mr. Woodward, by this report, did not drink milk from Crown Point when he was taken ill. That he was accustomed to drinking hydrant water without being boiled or filtered.

THIRD CASE. "No. 6330 Champlain Avenue, Mrs. Brennan sick three weeks; milkman, Follette; no ice; is accustomed to hydrant water without boiling or filtering."

Comment. Mrs. Brennan drank the polluted hydrant water without boiling or filtering. Also, it is not shown that Mrs. Brennan drank milk.

FOURTH CASE. "No. 6338 Champlain Avenue, Cummings, boy and uncle, sick three weeks; milk from Follette; ice from Morton Lake, water boiled."

Comment. Which was taken sick first, boy or uncle? Could not one have taken it from the other? If water was boiled at home, did uncle and boy always refrain from drinking raw water elsewhere?

FIFTH CASE. "No. 6319 Champlain Avenue, Mrs. Corrie sick three days; milk from Follette; ice from Northern Lake Company; water from hydrant, without boiling or filtering."

Comment. Polluted water, without boiling or filtering. I have an affidavit at hand from Mrs. Corrie that no typhoid exists at her house. I have also affidavits from James Brennan (third case) that he has had other milkmen than Follette, and that Follette's creamery is not the sole source of his supply. Anna R. Woodward (second case) makes affidavit that she does not use Follette's milk exclusively.

SUMMARY.

The evidence adduced in each one of these cases is not sufficient to sustain the conclusion reached, namely, that Follette's milk caused the disease. In the fifth case it certainly did not, for the affidavit says that no typhoid exists there.

Dr. Washburn's report of his inspection at Crown Point furnishes strong support for the Board of Health's conclusion. Please know, however, that Mr. Emerling and his physician, W. B. Blackstone, both make oath that no typhoid has existed on his farm for over eighteen months. Emerling keeps the County Alms House, and the case they had eighteen months ago was brought there sick. Emerling in his affidavit says: "The statement made by G. F. Washburn, M. D., that Emerling's eighteen year old daughter was taken down with it (typhoid) sixteen days ago, at a distance of twenty-five miles from the farm, is wholly false." Emerling's affidavit further declares that Washburn's statement saying "the cows are watered from a well which is 100 feet from the privy vault," is wholly false.

“The cows are watered from a well ninety-two feet deep, which is in a grove one-half mile from any house, barn or privy.”

Dr. Washburn's statement in regard to E Wild is true in every particular. His wife died with typhoid Sept. 11. His daughter died with the same disease Sept. 26. The house and farm are in an unsanitary condition and the water is polluted badly. Wild has not shipped milk to Chicago since Aug. 31. Prior to that time his milk might have carried typhoid infection to the city. It is also possible that the cases reported, if they drank Wild's milk, might have proceeded from the same, but as said milk was cut off by Indiana health officers on Aug. 31, the exclusion of milk from dairies in good sanitary condition and without sickness was not warranted.

Of the seventeen dairies furnishing milk to Chicago by the Erie Railroad from Crown Point, two were found in bad condition. The E Wild dairy, as stated above, and one owned by William Knopf. There is no sickness of any kind on Knopf's farm, yet his dairy has been closed until such a time as the health officer may deem it proper to open the same.

Recapitulation. The evidence presented by G. W. Washburn, M. D., concerning the cases on Champlain Ave., as shown specifically above, does not warrant the conclusion that the typhoid infection proceeded from Crown Point, Ind. This is especially true in regard to the case of Mrs. Corri, where typhoid does not exist, and, according to her affidavit, has not existed for one year past. In every instance reported, save one, raw polluted Chicago water was drunk. In the instance where water was boiled, it was not shown that the patients were not drinking raw water away from home. In a word, the evidence concerning these six specifically reported cases is wholly worthless in so far as the conclusion is concerned which attributes the epidemic to Crown Point milk. Dr. Washburn's report concerning George Emerling is proven to be without foundation by the affidavit of the two men named, and I might also add by my own inspection.

After gathering the evidence as detailed above, together with the reasoning as given, I telegraphed to Commissioner Kerr as follows:

September 26, 1896.

To Wm. R. Kerr, Health Commissioner, Chicago:

Dr. Blackstone, Health Officer of Lake County, Indiana, and myself have made sanitary inspection of every dairy that ships milk to Chicago by the Erie Railroad.

We find all but two to be free from typhoid, and in first-class sanitary condition, One of these two is free from any sickness, but is unsanitary. The other is very unsanitary, and has typhoid. Both have been put under close surveillance, and the milk and butter condemned. No milk from the typhoid dairy has been shipped to Chicago since August 31st.

This fact almost precluded the probability that typhoid infection has reached Chicago by milk from this point. You are officially insured that from this date no milk that is tainted with suspicion will be shipped on the Erie Railroad from Lake County. Please raise the present quarantine.

J. N. HURTY,

Secretary Indiana State Board of Health.

I also issued the following certificate to the officers of the Erie Railroad, which carried milk from Crown Point to Chicago:

CROWN POINT, September 26, 1896.

This is to certify that every dairy of Lake County, Indiana, shipping milk by the Erie Railroad, has been inspected, and all but two have been found in good condition, and free from any sickness. The dairy of E. Wild, where typhoid exists, has not shipped milk since August 31. The suspicious dairies have been closed and their milk condemned until such time as they may properly be again allowed access to the market. The milk shipped from this county by Erie Railroad from this date will be free from any infection, and will be pure and wholesome.

J. N. HURTY, M. D.,

Health Officer of Indiana.

I hope I have made no mistake in this matter, and have done only that which is right.

I am very respectfully,

J. N. HURTY,

Secretary.

INDIANAPOLIS, IND., September 29, 1896.

Hon. Wm. R. Kerr, Health Commissioner, Chicago, Ill.:

DEAR SIR—At Crown Point, Ind., in conjunction with Dr. W. B. Blackstone, Health Officer of Lake County, I made a thorough inspection of the seventeen dairies furnishing milk to Chicago from Crown Point over the Erie Railroad. Dr. Blackstone makes affidavit, now in my possession, that the following dairies are in good sanitary condition, and that no typhoid fever exists at any one of them:

Chas. Krohn,	J. Waltz,	Joseph Bohling,
Chris. Hirricks,	H. F. Myers,	Fred Main,
August Stoolmacker,	Julius Adank,	C. M. Baker,
Aug. Batz,	Wm. S. Schwucho,	Adam Popp.
Doll Sherman,	Schier,	

Dr. Blackstone further shows from the official records that typhoid is not prevalent in Lake County, and further, that in Crown Point and its vicinity only four cases have been known in the last quarter.

The report of Dr. Washburn concerning the farm of George Emerling is wholly refuted by the following affidavits:

CROWN POINT, IND., September 26, 1896.

I, George Emerling, do testify that I am the Superintendent of the Poor Farm, in Lake County, Indiana. My family consists of myself, three daughters and two

sons, all living with me. My daughter Barbara is now convalescing from a mild attack of lung fever. No typhoid has existed on this farm for one year and a half and the case we had then was brought here sick. We ship four cans of milk to Chicago daily. We have twenty-five cows, all well and healthy. My daughters, Barbara and Tillie, have not been absent from home for over twelve hours at one time in two years. The statement made by G. E. Washburn, M. D., that Emerling's eighteen-year-old daughter was taken down with it (typhoid) sixteen days ago at a distance of twenty-five miles from the farm is not true in any particular. Another statement by said Washburn, that the cows are watered from a well which is 100 feet from a privy vault, is false. The cows are watered from a well ninety-two feet deep, which is in a grove one half a mile from any house, barn or privy.

GEO. EMERLING,
Superintendent.

STATE OF INDIANA, }
COUNTY OF LAKE, } ss:

Subscribed and sworn to before me, this 26th day of September, 1896.

ARTHUR GRIGGS,
Notary Public.

At E. Wild's dairy conditions exist as reported by Dr. Washburn. Wild's place is in bad sanitary condition, and his wife and daughter are dead of typhoid fever. No milk, however, has been shipped by Wild since August 31st; prior to that date his milk very probably contained typhoid infection, yet in the face of this no one will contend that it is necessary to quarantine against other dairies in the same county which are sanitary, are free from other disease.

The dairy of Wm. Knopf was found very unsanitary, but no sickness among people or stock. It was, however, closed until such time as the health officer may consider it safe and proper to permit it to be opened.

I made personal sanitary inspection of the dairies of Wm. Kopf, W. Wild, J. E. Frass and George Emerling. The history of the first two is given, and the last two are clean and free from typhoid fever.

I feel confident that these facts fully sustain my telegram of September 26th.

Permit me to review the evidence of the six cases on Champlain Avenue, as given by Dr. Washburn, copy of which was furnished me by Dr. Riley. My comments are, of course, on the evidence furnished to me.

Case 1.—No. 6404 Champlain Avenue. Mr. Cameron, sick two weeks; milkman is Follette, No. 5639 Armour Avenue; ice from Hyde Park Ice Company. He has been removed to the Chicago Hospital. No one at home. Got information from a neighbor.

Comment: Nothing said about water. Information that Follette was Cameron's milkman was gotten from a neighbor, and so was not direct. No evidence that Cameron drank milk.

Case 2.—No. 6324 Champlain Avenue. Mr. Woodward, sick two weeks; milkman Follette at present, but was taken ill at Forty-second and Wabash, where he had milk from a private cow. Is accustomed to drinking hydrant water without being boiled or filtered.

Comment: Drank raw, polluted city water. Taken ill away from home while not taking Follette's milk. I have Mrs. Woodward's affidavit that she does not use Follette's milk exclusively, but at odd times purchases milk at various other places.

Case 3.—No. 6330 Champlain Avenue, Mrs. Brennan, sick three weeks; milkman, Follette; no ice; is accustomed to hydrant water without boiling or filtering.

Comment: Drank raw polluted city water. I have affidavit of James Brennan that he has not used Follette's milk exclusively, but from time to time has purchased milk from other dealers.

Case 4.—No. 6338 Champlain Avenue, Cummings, boy and uncle, sick three weeks; milk from Follette; ice from Northern Lake; water boiled.

Comment: Drank boiled water at home, but it is not shown that they did not drink raw polluted city water away from home at shop or office. This is the strongest case you present.

Case 5.—No. 6319 Champlain Avenue, Mrs. Corrie, sick three days; milk from Follette; ice from Northern Lake Company; water from hydrant without boiling or filtering.

I have Mrs. Corrie's affidavit that she has never had typhoid fever, nor has any member of her family had typhoid fever within the past year. By report drank raw polluted water.

Recapitulation. The evidence presented by G. W. Washburn, M. D., concerning the cases on Champlain Avenue, as shown specifically above, does not warrant the conclusion that the typhoid fever proceeded from Crown Point, Indiana. This is especially true in regard to the case of Mrs. Corrie, where typhoid does not exist, and according to her affidavit has not existed for one year past. In every instance reported, save one, raw polluted Chicago water was drank. In the instance where water was boiled, it was not shown that the patients were not accustomed to drinking raw water away from home. In a

word, the evidence concerning these six specifically reported cases is wholly worthless in so far as the conclusion is concerned which attributes the epidemic to Crown Point milk. Dr. Washburn's report concerning George Emerling is proven to be without foundation by the affidavit of these two men named, and, I might also add, by my own inspection.

From these facts and reasoning presented I felt warranted in sending to you the telegram of September 26 and also issuing a certificate, as follows :

CROWN POINT, September 26, 1896.

This is to certify that every dairy in Lake County, Ind., has been inspected and all but two been found in good condition and free from any sickness. The dairy of E. Wild, where typhoid exists, has not shipped milk since August 31. The suspicious dairies have been closed and their milk condemned until such a time as they may properly be again allowed access to the market.

The milk shipped from this county by Erie Railroad from this date will be free from infection and will be pure and wholesome.

J. N. HURTY, M. D.,
Health Officer, Ind.

I hope I have not made any mistakes in this matter and that only the right has been followed. Very respectfully yours,

J. N. HURTY,
Secretary.

LETTER TO ALL COUNTY SECRETARIES.

INDIANAPOLIS, IND., October 27, 1896.

DEAR DOCTOR—We send by express a package containing three different sets of health circulars. Circular No. 5 is in two parts. The large sheet, marked No. 5, gives the rules of this Board, which govern physicians and health officers when visiting, knowingly, persons sick of contagious or infectious diseases. The small circular, marked No. 4, contains the special rules of this Board, governing the sanitary conduct of schools. Both sets of rules are to be promulgated by publishing them in three successive issues of some paper of general circulation in your county. When this is done they become law and must be obeyed. According to the statute the order of this Board to subordinate Boards to promulgate its rules shall be obeyed, and the Board of Health of County is hereby ordered to promulgate the rules passed October 12 and 16, as contained in health circulars Nos. 4 and 5.

The small circular, No. 5, is to be distributed to houses where diphtheria may exist, and this shall be done when the contagious disease flag or placard is posted. A copy of health circular No. 4 is to be sent to every Township Trustee in your

county. As Secretary of the County Board of Health you are instructed to immediately carry out the directions above given, and to make a report to this Board by December 1, 1896.

If you do your full duty in this matter, much sickness, many deaths and the consequent loss of a great deal of money will be prevented.

By order of Indiana State Board of Health,

DOUGLAS C. RAMSEY, M. D.,
President.

J. N. HURTY, M. D.,
Secretary.

LETTER TO ALL COUNTY SECRETARIES.

INDIANAPOLIS, IND., October 29, 1896.

DEAR DOCTOR—The usefulness of the statistics which the inclosed blank, when filled, will afford, is plain to you. We desire you to attend to this immediately. We desire, also, that you write us a letter upon health and sanitary conditions in your county. In said letter we will expect you to give the total number of deaths reported, an analysis of the diseases causing said deaths, your opinion of the present sanitary conditions and any criticisms or suggestions you may have to make. The letter will be printed in our forthcoming report.

Very truly and respectfully yours,

J. N. HURTY, M. D.,
Secretary.

WATER WORKS STATISTICS.

Date.....

County..... Health Officer.....

Give the names of cities and towns in your county having water works. State for each (a) when said works were built; (b) their cost; (c) whether owned by city or private parties; (d) number of gallons of water pumped daily; (e) estimated number of inhabitants who use the public supply; (f) number of deaths during 1896 from typhoid fever.

[illegible]

SPECIAL REPORTS OF COUNTY HEALTH OFFICERS CONCERNING THE HEALTH, SANITARY CONDI- TIONS AND SANITARY NEEDS OF THEIR RE- SPECTIVE COUNTIES.

ADAMS COUNTY.

DECATUR, IND., November 11, 1896.

In reply to your circular letter of November 4, will say that the health of the people of Adams County has been good for the past year. There have been quite a number of cases of typhoid fever, due more to the carelessness of the people themselves than to any other cause.

The sanitary condition of our county is getting better year by year. The sanitary condition of the court house, jail and infirmary is very good. The city prison is an eyesore and disgrace to the city, and has been condemned by both city and county boards of health, and there have been no steps taken to rectify it.

In regard to the number of deaths reported for the year last past, we have reported forty-nine deaths. The diseases producing these deaths have been reported as follows:

Puerperal fever, 1; nephritis, 1; malnutrition, 1; consumption, 4; pericarditis, 1; cerebral hemorrhage, 3; general debility, 1; convulsions, 1; cerebral abscess, 1; premature birth, 1; cholera infantum, 5; cancer, 1; typhoid fever, 2; paralysis, 2; tuberculosis, 2; appendicitis, 1; uræmic poisoning and chronic cystitis, 1; scrofula, 1; organic heart disease, 1; dysentery, 1; asthenia, 1; heart disease and dropsy, 1; sclerosis of liver and kidney, 1; pneumonia, 2; traumatism, 1; diphtheria, 1; spinal fever, 1; softening of brain, 1; la grippe, 4; peritonitis, 1; Bright's disease, 1; septicæmia, 1; pseudo-membraneous croup, 1.

We requested you some time ago to send us some blank books, to supply physicians for their reports of births, deaths and contagious diseases, and have not received any as yet. We are completely out of blank books and hope you will send them at once, so we can supply the physicians with them.

Since I last wrote you we have had five cases of diphtheria in Decatur, with two deaths. Will let you know if any more cases occur.

Respectfully yours,

H. F. COSTELLO.

ALLEN COUNTY.

The city of Fort Wayne is the county seat of Allen and has a population, including the suburbs, of about 65,000 inhabitants. The city water supply is derived from bored wells sunk into gravel and rock strata. The water is forced into the mains from two pumping stations: one at the foot of Van Buren Street and the other a short distance north of the North Side Park. Based upon the number of water permits issued and allowing the water used for fires, sprinkling

and all other purposes, the computation shows a daily supply of about seventy gallons per individual. The supply is not exposed to any contamination until it is drawn from the consumer's tap. A chemical and bacteriologic analysis is made weekly, the sample taken as it flows from the laboratory tap. This work is done by Dr. L. P. Drayer, City Chemist and Bacteriologist. The examination consists of the determination of the free and albuminoid ammonia, chlorides and solids after evaporation. The number of bacteria present is determined by gelatine-plate culture, and to this examination the greatest importance is attached. The quality of water, as it is supplied to the consumers in the city, is *exceptionally* good. Examinations reveal occasional traces of ammonia, a small percentage of chlorine, bacteria present ranging from 250 to 500 per cubic centimeter, none dangerous or detrimental to health. In no instance has it been possible to isolate typhoid fever bacilli in the city supply. Old wells which have been contaminated have been invariably condemned. The city has 200 miles of pipe, a reservoir holding 3,500,000 gallons, one pump with a pumping capacity of 3,000,000 and another one with a capacity of 9,000,000 gallons daily. We have over 6,000 consumers, which is more than cities of twice the size of Fort Wayne can say. The total net construction of the water-works up to date will amount to about \$400,000. During the past year 1,043,892,273 gallons of water were pumped, being an average daily pumpage of about 3,000,000 gallons.

The health of the city has been good; no epidemic of any sort. Diphtheria is with us, as in all larger cities, endemic, and have at present only nine cases. All cases of diphtheria are generally well reported, a bacteriological examination made by our efficient bacteriologist, Dr. Drayer, and proper quarantine enjoined.

The county at large has been in a healthy condition, and no epidemic of any kind occurred; due in large measure to improved drainage. County asylum and jail are in a good sanitary condition and ably managed.

DR. CARL PROEGLER,

Secretary County Board of Health of Allen County, Ind.

FORT WAYNE, IND., December 11, 1896.

Concerning our garbage crematory I report the following:

Cost of plant—Dixon Crematory	\$8,100 00
Cost of closed iron wagons (4)	900 00
Cost to operate same:	
Fuel gas at 10 cents per 1,000 feet, per month	110 00
Two men, salaries, per month	85 00
Four teams and four men, for collecting garbage	280 00
Total	\$475 00

The above is the cost when an average of twenty (20) tons of garbage is consumed daily.

In a special test of the system made October 3, 1895, the following facts may be of interest:

Garbage, 15 tons, delivered at intervals; night soil, 8 barrels, delivered at 10 A. M.; dead horses, 3, delivered at 2 P. M.; coal consumed, 1½ tons. Time, 10 hours.

Daily expense of operating crematory for above:

Per day of ten hours, one man	\$2 00
Per day of ten hours, 1½ tons coal	3 60
Total	\$5 60

Total cost per ton of garbage, 28 cents. The coal used was Indiana lump.

The ash, as shown by chemical analysis, is of only moderate value as a fertilizer. The ash is free from organic matter, there being present no partially consumed garbage. No odor can be detected coming from the smoke-stack, the only odor detected was in the room at the time garbage was being dumped into the fire.

The above are the facts as I learned them from Mr. Eggemann, Chairman of the Board of Public Works.

If there is anything I have omitted, please let me know.

Yours very truly,

L. P. DRAYER, M. D.,
City Health Officer.

BOONE COUNTY.

LEBANON, IND., December 17, 1896.

I am truly glad to be able to report to you that this county, with the exception of influenza, was not distressed with anything like an epidemic.

Influenza, during the first part of the year, was quite prevalent, but so far as I know, deaths attributed directly to it were very few. Doubtless, it had its influence upon other diseases, making them more fatal. We have had a few cases of scarlet fever in some parts of the county, but were able to keep it controlled by strict observance of quarantine.

Diphtheria has for several years showed itself in this county at the opening of the schools. In most instances it has been brought to us from other sections of the State. In the southern part of the county it has made its appearance every fall for twenty years, and covers a territory from Jamestown to Indianapolis about five miles in width. This year it has given us more trouble than for some years. There were forty-three cases reported, with eleven deaths.

There has been but few cases of typhoid fever, and they were mild in type.

Croupous pneumonia was not so severe as it often is in this part of the State.

We have had a large number of deaths from that great destroyer, tuberculosis. This disease must receive especial attention from Sanitary Boards.

The sanitary condition of our county is good, but can be greatly improved.

Most of the school buildings are new, and many of them are furnished with good water from deep wells, and all ought to be.

The physicians and local Boards of Health are always ready to assist the health officer to control any contagious or infectious disease.

Our people are learning the motto "quarantine the sick, and the well will take care of themselves."

Ask for \$50,000 this year, and then you will be able to accomplish something for the State.

Yours most truly,

WM. H. SCHULTZ,
Secretary County Board of Health.

CRAWFORD COUNTY.

ENGLISH, IND., November 21, 1896.

In reply to your recent inquiry as to the sanitary condition of Crawford, I will say that it is in good condition at present. Most all of the school houses of this county are not substantial structures, not very well ventilated and not supplied with good water. Our new court house is nearly completed, and will be a magnificent building, well ventilated; and the jail when completed will be in excellent sanitary condition. The court house and jail are located on a hill, and the drainage is good; also free from offensive odors.

Our poor house is well situated and is in a good sanitary condition. The rooms are all large and well ventilated, and the inmates are well cared for, both in food and clothing.

Since I have been Secretary I find that some of our doctors are not prompt to report births, and timid in reporting deaths which might reflect on their mistakes.

GEO. R. HAZLEWOOD, M. D.,
County Health Officer.

P. S. I have sent a copy of Health Circular No. 4 to every Township Trustee in our county, and I am having the special rules published in our county paper, of which I have sent you two copies.

Yours truly,

GEO. R. HAZLEWOOD.

DELAWARE COUNTY.

It is my custom at each quarterly meeting of the County Commissioners to present to them a written report of my work the previous quarter. These reports have treated of: 1. Statistics. 2. Sanitary condition of county and public buildings. 3. Epidemics. 4. Visits made by me to various places. 5. Nuisances and efforts made to abate them. 6. Recommendations.

I have constantly insisted in these reports that the Commissioners *are the County Board of Health*, and that upon them rests a great responsibility.

I append the following, showing statistical reports for two quarters.

For quarter ending March 31, 1896:

BIRTHS.

Total number, 136. Males, 75; females, 61. First births, 37; second, 37; third, 16; fourth, 13; fifth, 8; sixth, 11; seventh, 4; eighth, 6; tenth, 1; eleventh, 3.

DEATHS.

Pneumonia, 8; congestion of brain, 1; inanition, 1; consumption, 5; Bright's disease, 1; diphtheria, 4; acute nephritis, 3; cancer, 1; la grippe, 3; senility, 4; apoplexy, 2; inflammation of bowels, 1; heart disease, 2; accident, 1; typhoid fever, 1; paralysis, 1; scarlet fever, 1; nervous prostration, 1; dropsy, 2; bronchitis, 1; congestion of stomach, 1; erysipelas, 1; alcoholism, 1; congestion of

lungs, 1; acute tuberculosis, 2; enteritis, 1; capillary bronchitis, 1; unknown, 2; torpidity of liver, 1; injuries of head, 1; intestinal obstruction, 1; injury of spine, 1; suicide, 1; mental depression, 1. Total, 60.

CONTAGIOUS DISEASES.

January, diphtheria, 15; scarlet fever, 13. February, scarlet fever, 9. March, diphtheria, 2; scarlet fever, 2.

During the month of January there occurred 38 marriages, February, 23, and March, 29.

During the quarter ending September 30, 1896, the death rate was high, diphtheria and consumption heading the list, as seen below:

BIRTHS.

Total, 209. Number of first births, 59; second, 30; third, 28; fourth, 31; fifth, 17; sixth, 11; seventh, 9; eighth, 7; ninth, 3; eleventh, 3; not reported, 1.

DEATHS.

Diphtheria, 12; consumption, 12; cholera infantum, 9; dysentery, 5; meningitis, 5; entero-colitis, 4; cancer, 6; typhoid fever, 9; heart disease, 4; congestion of brain, 2; inanition, 2; cholera morbus, 2; malarial fever, 3; Bright's disease, 4; old age, 2; drowned, 2; accident, 4; paralysis, 3; peritonitis, 2; gastritis, 2; dropsy, 2; laryngitis, 3; congestion of bowels, 3; cerebral embolism, 2; paramenia, 1; suicide, 1; abscess of brain, 1; bronchitis, 1; acute pneumonia, 1; gangrene, 1; elephantiasis, 1; general debility, 1; hemorrhage, 1; unknown, 1. Total, 114.

CONTAGIOUS DISEASES.

Diphtheria: 12 cases in July, 7 in August, 28 in September. Total, 47.

Scarlet fever: 2 cases in July, 9 in August, 7 in September.

Typhoid fever: 9 cases in July, 13 in August, 34 in September. Many not reported.

MARRIAGES.

Total, 57. July, 24; August, 19; September, 14.

These two quarters show 174 deaths in six months, a little above the average, which is 325 to 350 deaths per year.

For the past year diphtheria has persistently invaded various parts of our county, first here, then there, and it has only been by the most earnest co-operation of most of the physicians, the local health officers and the intelligent and law-abiding citizens that the disease has not become more widespread and a greater mortality resulted.

Our physicians who have used diphtheria antitoxin are indorsing it most earnestly. During the past year about 100 cases have been treated with antitoxin. In the majority of these cases the results have been decidedly gratifying. Our experience here has taught us to use it early and in large doses, as it is perfectly harmless.

Consumption is on the increase in this county, due, as I believe, to the carelessness of consumptives and their attendants and possibly to the use of tuberculous

meat and milk. While upon this subject I wish to submit the following excellent report of Dr. O. L. Boor, veterinarian to the County Board of Health, and who has labored earnestly for months, making a thorough inspection of the twenty-two dairies selling milk in Muncie. Dr. S. M. Ried, City Health Officer, Muncie, has actively assisted Dr. Boor in this work. The inspection shows that the cows, generally, are in good condition. No tuberculin tests were made. The sanitary condition of some stables must be improved or the men will be forced to quit the business. We hope that we shall soon have a city ordinance providing that dairy-men be licensed and that an inspector be appointed to inspect milk, cows and stables, etc.

Dairies are Known by Numbers.	No. of Cows.	Gals. of Milk per Day.	Condition of Cows.	Condition of Barn.	Drainage of Stables.	Sanitary Surroundings.	PLACE OF WATERING.	PLACE OF COOLING MILK.
1	29	40	.25	.20	.20	.20	Well	Barn.
2	60	45	.25	.20	.15	.20	Spring	Well trough.
3	22	35	.15	.20	.20	.05	Well	Barn.
4	19	40	.20	.10	.10	.05	Well	Room in close connection with chicken house.
5	22	45	.25	.20	.20	.20	Well	Barn.
6	18	35	.25	.20	.25	.20	Well	Barn.
7	7	20	.25	.10	.00	.15	Well	House.
8	13	35	.20	.15	.10	.15	Well	Well trough. Milk strained at barn.
9	15	25	.20	.10	.00	.10	Well	Well trough.
10	35	50	.20	.25	.25	.20	Well	Barn.
11	25	45	.15	.05	.00	.00	Well	Well trough.
12	14	35	.25	.25	.25	.20	Well	Room adjoining barn.
13	100	75	.20	.15	.20	.20	Branch well	Well trough.
14	16	32	.25	.15	.15	.20	Well	Well.
15	22	40	.25	.25	.25	.20	Well	House.
16	7	13	.25	.15	.20	.20	Well	House.
17	10	25	.15	.10	.05	.15	Well	House.
18	11	24	.20	.15	.10	.15	Spring	House.
19	42	65	.20	.05	.00	.00	Ditch from well	Barn. This dairy should be seen to at once.
20	6	12	.15	.05	.00	.10	Buck Creek	House.
21	4	8	.20	.10	.00	.10	Ponds and well	House.
22	16	25	.20	.20	.20	.20	Well	Milk taken to house.

Total number of cows, 513. Gallons of milk per day, 5,369.

It is to be understood that in the above table 25 is taken as a standard in comparison of the condition of cows, barn, sanitary surroundings, etc.

In conclusion I will say that the sanitary condition of our public buildings is good.

Recently two cases of diphtheria appeared in the Children's Home, one-half mile north of Muncie. Dr. Green, the attending physician, promptly isolated the cases, administered antitoxin and up to this date no other cases have occurred.

As to the habits of physicians in attending contagious diseases, there is no doubt but that many are more careful than was the custom several years ago. Some are careless to a criminal extent, but the majority of our physicians are careful.

Respectfully,

HUGH A. COWING, M. D.,
Secretary County Board of Health.

DUBOIS COUNTY.

The health of this county for the year ending September 30, 1896, has not been quite so good as in the previous year. There were 180 deaths from all causes. Of these there were twenty-one deaths from diphtheria, fifteen from typhoid fever and four from scarlet fever. An epidemic of diphtheria broke out about August 1 in Columbia Township, which spread in some degree to the other townships, there still being a very few cases reported at this writing (December 18, 1896). For the statistical year eighty-seven cases of this disease were reported.

The physicians having charge of the cases were early instructed how to proceed and were urged to use every precaution to prevent the spread of the disease; but in spite of all endeavors eighteen deaths resulted. The greatest trouble in preventing the spread of the disease was the obstinacy, if not ignorance, of the people. It would require a police force to quarantine some of them. Physicians, as a rule, were active and did all they could to stamp out the epidemic. Antitoxin was used by several physicians, and all who used it have praises for its efficacy.

Typhoid fever prevailed to some extent, but not more than in other years. There were as many cases in the country as in the towns, and the source of its cause was hard to trace.

The sanitary condition of the schools and other public buildings is fairly good.

The Secretary has promulgated and endeavored to enforce the rules and regulations of the State Board.

B. B. BRANNOCK, M. D.,
County Health Officer.

FAYETTE COUNTY.

CONNERSVILLE, IND., December 18, 1896.

In making a health report for the year ending September 30 we find it impossible to be exact in our summary. We can only approximate the subjects of a Secretary's report, because of the incompleteness of the returns which form the data of a report.

There were thirty-four deaths during the year from the following named diseases: Typhoid fever, 9; scarlatina, 3; consumption, 14; cancer, 8.

There were thirty-one cases of typhoid fever and sixty-eight of scarlatina reported, and not a single case of diphtheria. Measles in a light form prevailed during the months of April, May and June—no deaths.

The sanitary condition of the county is good, notwithstanding the above record of typhoid fever. All these cases were not contracted in the limits of Fayette County; what per cent. came from abroad I am not able to determine. Several cases, however, were to my knowledge contracted beyond the confines of our county. Scarlatina was scattered over the entire county, but was more general on the western border, where it was not kept under control. The people, as a rule, are willing to be governed by the rulings of the Health Boards, but little can be done when the doctors of a neighborhood do not work in harmony. The remedy for this class of evils is to make the rules of the State Board of Health statutory and then enforce them.

S. N. HAMILTON,
Health Officer.

FLOYD COUNTY.

NEW ALBANY, IND., December 16, 1896.

Permit me to say that I am unable to furnish the analysis of the causes of all of the fatalities in this county during the past year in the manner as indicated in your letter. The "reports," as they come to me, are so meager, that it is impossible to condense them in a way that would be of value, other than the quarterly returns already sent in.

Only about one-third of the births and deaths of the county, I estimate, have been given in. In looking over the "birth returns" since the first beginning of the Health Office, I find that only one child in about eight has received a name and, except as a record that a male or female child was born at such a time, the books are of little service.

In regard to "contagious diseases," physicians scarcely report them at all, while they observe in a general manner the spirit of the law, viz., to prevent the spread, so far as the caution of placards, the rules of disinfection and cleanliness, the restriction at burials, etc. More than half of the birth and death returns (and the same is true in respect to marriage reports) sent me this December, have been delayed since the early summer, and some since the past winter. Would it not be well that physicians be required to make their returns at longer intervals, instead of at the end of each month, the task of the monthly report being irksome, and too short a time, as in case of obtaining the name of a newly-born child? The duty consequently devolving on the County Health Officer, having to compile his report from a greater accumulated mass would be greater labor, but when done would be of more value as a basis for statistics, being correctly distributed throughout the year.

In reply to questions concerning "water works," "number in county," "cost," etc.:

Our water works, a system much admired, were built in 1875, and at a cost to date of \$400,000, with a per diem capacity of 2,500,000 gallons. The pumps are employed at this rate two-thirds of the time. The mouth of the suction pipe is thirty feet from the shore of the river (Ohio) at low water mark, and is covered with a strainer. The reservoirs, of which there are several, are located 200 feet above the level of the city. The water is floated slowly through opposite diagonal corners from one reservoir to another, allowing sufficient chance for settling and aeration by exposure to the strong currents of air on top of the knobs. There are

at present 1,200 subscribers, or about 5,000 people, who use the hydrant water for all purposes. There is no public water supply, except three free troughs for horses. It is impossible to estimate the number who use the hydrant, or river, water, as many who have it in their houses, prefer to use town-pump or winter cistern water, and, on the other hand, many on occasion drink at the hydrants in stores and public halls.

Few people have died during the past year from typhoid fever, and they mostly out of the city and miles from the river, in a pleasant-looking, undulating and limestone country.

The New Albany Water Works Company claim that they made, in 1894, a careful canvass among their patrons and found, for that year, but one case of typhoid fever. Mr. C. W. Cotton, in his "Description of New Albany, Ind.," says: "Many kinds of disease are attributable to foul air and polluted water, but diphtheria, typhoid fever and kindred complaints are found in country villages, where only well water is used. When they become epidemic in cities they are supposed to have been caused by river water, while, perhaps, more attributable to other sources. Drainage from cesspools and penetration by common sewage often pollute wells at a greater distance than would be expected. Well and cistern water, when kept closed and stagnant, become a more fruitful field in which multiply bacteria or other noxious germs than running water. The rapid and continuous churning which water gets in coming over the falls results in thorough aeration, and, in our judgment, the New Albany water works supply is far safer for general use than any of the products of the city wells."

Locally our sewage for the greater part is conducted into the Ohio River below the suction pipe of the pumping station. It has always been the effort of our city authorities to keep our own river front free from the emptying in of sewers.

However, when we consider the sewage of many towns and cities, the offal of thousands of human habitations in the great drainage bed of this river and that its floor for hundreds of miles is paved with the slimy bones and flesh of all dead things, no attempt made anywhere to remove noxious properties of the water, nor to amend its low chemical and bacterial purity (except the settling in the reservoirs), the wonder must be that there is and always has been so low a typhoid fever rate.

Floyd County has a comparatively new Poor Asylum, one of the largest and best equipped in the State. There are usually from forty to eighty inmates, the greater number in the cold season. The inmates have always maintained a condition of good health. The county and city prisons are in good sanitary condition. Hydrant water is used; the hose, with a strong column of water, is an efficient means of cleaning walls, floors and remote corners, when well dried "white wash" is used as needed.

About 6,000 beef cattle are consumed in the city and county per year; two-thirds are from Kentucky and Tennessee, many of them being brought there from the Southwest. The presence of several from this source with splenic fever in June last led to a correspondence with the State Stock Sanitary Board, requesting the appointment of a deputy cattle inspector, owing to want of authority to make such appointment. The Board suggested that the exposed border counties along the Ohio River appoint their own inspectors. In accordance with this advice the City Council passed an ordinance requiring that all beef cattle be inspected, which was supplemented by the Board of County Commissioners appointing Dr. Thomas Love to extend his office to the inspection of all milk dairies of the county. He has, since his appointment, from June to December 1, 1896, inspected 2,600 dairy and

beef cattle, with results, viz.: Quarantined, 3, on account of ticks; condemned, 9, viz.: Erythema, 1; lump jaw, 2; tuberculosis, 2; tuberculous udders, 2; "stomach staggers," 1; founder, 1. His office gives general satisfaction and increases confidence in the wholesomeness of the milk and beef supply of the county.

"The Rules and Regulations for the Management of Dairies," issued March 12, 1896, have been published as required and placed in all of the thirty dairies of the county. Complaint is made of much of it, of its impracticability mainly; especially are sections 14 and 16 objectionable. Cleanly people obey most of the rules. The instinctively dirty can not learn any of them.

The proper observance of all the rules involves a constant round of inspection by the health officer and a spirit of obedience on the part of the people not popular outside of a military relation. Objections of the same kind apply to the rules concerning grocerymen in regard to the open exposure of their meats, dried fruits, etc. Here, *e. g.*, among a hundred or more grocerymen, and peddlers, with changing places of business, the health officer must stand alone and almost aside, until public sentiment concedes that the health rules are salutary for the avoidance of flying disease germs. If our Metropolitan Police and Police Boards, with their prestige of authority, would lend their aid in the conservation of public health, then would the task be easier. State Board Rule IV, relating to the sanitary conduct of all schools, has been published as directed, and placed with all teachers of the county. Teachers and Superintendents have cheerfully co-operated in having them understood and applied. Objections are alone offered to scrubbing desks with soap, as the varnish is destroyed; also to sterilizing pens and pencils, a proper apparatus being inconvenient and expensive, the continued heat rendering the pencils useless; besides this, increased janitor's fees, etc.

In this connection the Board of County Commissioners complain of the State law requiring them to pay for the publications of the rules of the State Board of Health. It is desired that this be done by the State Printer, thereby saving to each county a very considerable expense.

In the culmination of "hard times" during the year 1896, with no very high living, and an inconsiderable amount of hard labor, our county, and especially our city, has enjoyed the best health possible.

Very respectfully,

JOHN H. LEMON, M. D.,

Secretary Floyd County Board of Health.

FOUNTAIN COUNTY.

COVINGTON, IND., November 16, 1896.

To the members of the State Board of Health, and in response to a letter of inquiry as to the sanitary condition of my county (Fountain), will say that it is in very good condition. Since my last report we have had some cases of diphtheria, but by strict observance of the rules of the State Board of Health we have been very successful in stamping it out. We have had but a very few cases of typhoid fever in this county this fall, and but a small per cent. of deaths. I have tried to enforce the laws to the best of my ability. There seems to be a lack of appreciation of the good which is derived from a close observance of the State Board laws upon the part of all physicians everywhere. But by constant work I have secured good reports and a fair observance of same. Below you will find a report of number of deaths, with an analysis of same.

Whole number of deaths reported to date in 1896, 84: Bright's disease, 3; la grippe, 2; typhoid fever, 6; erysipelas, 1; asthma, 1; dysentery, 3; consumption, 7; endocarditis, 2; brain fever, 2, stillborn, 3; inanition, 1; amputation uterus, 1; senility, 4; heart failure, 3; gunshot wound, 1; pneumonia, 6; bronchitis, 1; diphtheria, 6; uræmic poisoning, 1; apoplexy, 1; puerperal fever, 1; gastritis and impaction, 1; scarlet fever, 3; cholera infantum, 3; strangulated hernia, 1.

W. R. STOUT, M. D.,
Secretary Fountain County Board of Health.

FRANKLIN COUNTY.

BROOKVILLE, IND., November 10, 1896.

The sanitary condition of Franklin County is reasonably good except the water supply for some of the schools, and the carelessness of the citizens in throwing dead animals in some out-of-the-way place or in a stream of water, if near by. Such offenses are difficult to get an indictment against.

Birth, death and disease returns are very poorly reported, and it seems impossible to get some physicians to attend to it under the existing laws. I have been sending postal cards to each physician at the end of each quarter, requesting the returns to be forwarded. Even this fails in getting full returns.

I think a law requiring burial permits in all cases of death the only way to get the returns in full.

The diseases causing deaths in Franklin County, Ind., from November 1, 1895, to October 31, 1896, are as follows:

Drowning, 1; chronic synovitis, 1; senile gangrene, 1; la grippe, 2; measles, 2; cholera infantum, 4; suicide, 3; apoplexy, 13; pneumonia, 12; typhoid fever, 6; old age, 9; carcinoma, 3; convulsions, 3; heart disease, 10; phthisis pulmonalis, 11; nephritis, 4; scalded, 1; dysentery, 10; epilepsy, 1; not reported, 3; hemorrhage, 2; diphtheria, 6; inanition, 5; œdema of glottis, 1; intestinal obstruction, 1; peritonitis, 1; puerperal septicemia, 2; cirrhosis of liver 1; meningitis, 1; gastritis, 1; scarlet fever, 1; congestion of brain, 2; bronchitis, 3; inebriety, 1.

Respectfully,

GEO. E. SQUIER,
Secretary County Board of Health.

FULTON COUNTY.

ROCHESTER, IND., December 1, 1896.

In obedience to your request of November 4 that I make a report of the diphtheritis cases and the sanitary conditions in this county to the State Board of Health by December 1, 1896, I herewith submit my report for your consideration.

Referring to my "Return of Disease" I find that the first case of diphtheria was reported August 21, 1896, by W. E. Hosman, M. D., of Akron, Fulton County, Ind., and the contagion was located three miles north of Akron and about eight

miles northeast of Rochester, among a religious sect known as and so called the Sanctified or Saints' Church people. It was the first case reported in this county and proved fatal on the fifth day, aged three years. Since the above date there has been reported and diagnosed as diphtheria sixty-one well-developed and, I think, unquestioned cases. Of these eight died at ages from three to fourteen years.

All the cases diagnosed as diphtheria had the membrane spread over (not in patches, indicating tonsillitis) the tonsils, pharynx and larynx, extending to the nasal fossæ, great fetor of breath, persistent vomiting, great glandular swelling, extreme prostration from beginning, cold extremities, constant discharge from the nose, marked fetor, scanty urine. Lost no cases except those five who died of neglect, not having received prompt medical attention. The deaths, all but two, occurring among the above-mentioned religious sect, who do not believe in doctors, but treat their sick by prayer, singing and laying on of hands, but they soon come to realize the fact that their peculiar method of treatment might cure hysteria but would not cure diphtheria, so Drs. Harter and Hosman, of Akron, and the writer were called in to treat their diphtheria cases, and after prescribing for my cases I informed them that they might pray and sing if they saw fit to do so, and assured them that it would not interfere with the treatment, but, on the contrary, the two might work together very well; so that seemed to satisfy them, and, I am happy to say, from that time on our diphtheria cases all got well. I was compelled to adopt very stringent measures with these sanctified people. They were inclined to disregard and ignore the usual quarantine regulations, so I was compelled to adopt more drastic measures. I had three extra deputy sheriffs sworn in and placed on duty in the diphtheria districts to guard the infected houses day and night and to see that my instructions were explicitly carried out, and these officers were kept on duty until the epidemic of diphtheria had run its course and the diphtheria cases were all convalescent and the infected houses and inmates had been thoroughly cleaned and disinfected. Many of the cases were only partially isolated, owing to the fact that they had very large families and dwelt in two and three room one-story houses.

The contagion extended over an area of five miles, and as the cause of the epidemic, I traced it to filth and unsanitary conditions. The contagion was very largely confined to families in very limited circumstances, with a large number of children, living in small and illy ventilated apartment houses.

A TABULATED REPORT OF CASES TREATED, DIAGNOSED DIPHTHERIA, MALIGNANT TYPE.

- Dr. C. F. Harter (Regular), number of cases treated, 10; no deaths.
- Dr. E. E. Rhodes (Regular), number of cases treated, 3; one death.
- Dr. W. E. Hosman (Eclectic), number of cases treated, 23; four deaths.
- Dr. J. Richards (Regular), number of cases treated, 1; no death.
- Dr. A. Brown (Homœopathist), number of cases treated, 1; one death.
- Dr. J. W. Iorns (Homœopathist), number of cases treated, 23; two deaths.

As to the treatment and remedies used: Drs. Harter, Rhodes and Richards, of the regular school, and Dr. Hosman, of the eclectic school, prescribed the usual medicines recommended by their respective schools and were quite successful with their cases. Drs. Brown's and Iorns' cases were treated homœopathically. As to treatment and remedies used in my cases, at the outset of the disease, with great dryness and redness of the throat, with high fever and sore throat, before the

exudation takes place, aconite, belladonna and apis mel. are my first choice of remedies. After the exudation, kali bichromic.; second, trit., merc., bin. iod.; third, trit. As gargle or spray, of dilute alcohol one ounce to three ounces of warm water, or gargle of the chloride of potassium—not the chlorate—one drachm to six ounces of tepid water, every hour until the membrane is all dissolved or detached. When great irritability and rawness, I use the tincture of eupatorium arom., two drachms to three ounces of hot water, with an atomizer or by insufflation. It is very soothing and valuable as a bactericide.

As a *prophylactic*, I fumigated the throat and nasal cavities two or three times a day with tobacco smoke; as a germicide, I found it the most efficient of all the means used, possessing in a marked degree the property of retarding the development of micro-organisms and completely arresting and destroying the diphtheria bacillus or microbes. The stronger the tobacco was in nicotine, the greater was its antiseptic properties.

The present sanitary condition and health of Fulton County is good.

I trust I have not taxed your valuable time by my extended detail.

Believe me yours very truly and fraternally,

JOHN W. IORNS,
Secretary and Executive Officer.

HAMILTON COUNTY.

In accordance with your request, I will say for Hamilton County, in general, the health has been very good. We have not had epidemics of any of the diseases dangerous to the public health.

For the year ending September 30, 1896, we had in the county from all causes 164 deaths. Fifty-four cases of typhoid fever reported, with twenty-one deaths. Sixteen deaths from cholera infantum, eight deaths from la grippe, thirteen deaths from pneumonia, thirty-two from consumption.

The city of Noblesville has been in a very good sanitary condition. The sewerage and drainage is first-class.

The sanitary condition of poor farm buildings are as good as can be made. Most of the inmates are kept in the new buildings, because the old ones are not as healthy. The water supply is furnished by wells outside of buildings. The food supply is as good as is found at any county poor house, and heat of building is furnished by natural gas.

The Trustees of the various townships take a great pride in keeping the school houses in a good sanitary condition. The school buildings of Noblesville are in first-class sanitary condition. The water closets are constructed so that the hot air dries the excreta without odors arising. The buildings are supplied with water from the city water works, the supply being from second water wells.

The jail is not in good condition, but this will soon be remedied.

E. C. LOEHR,
Secretary County Board of Health.

HANCOCK COUNTY.

GREENFIELD, IND., December 4, 1896.

Received your letter some time ago, asking me to write a letter on health and sanitary condition of this county. In reply will say that the health of this county has been about as usual so far this year. We have had the diseases peculiar to the different seasons of the year. Dysentery was quite prevalent during the months of July, August and September, with quite a number of deaths. The disease was generally the same over the county. In the city of Greenfield the disease was not so prevalent among those who used the city water as those who did not.

We have had quite a number of deaths from consumption, distributed among all grades of society and the different ages, from infancy to old age.

Typhoid fever has been quite prevalent throughout the county, as much so in the country as in the towns. In the city of Greenfield there were but few cases, if any, among those who used the city water. The deaths reported from typhoid fever in many instances were attributed to the complications and not to the disease itself.

The total number of deaths in county from all causes is 146. Of this number there are 11 from typhoid fever and complications, 18 from consumption, 10 from dysentery, 14 pneumonia and the remaining deaths from the numerous diseases and causes which befall the human family. The sanitary condition of the county is very good, above an average of the counties of the State, but there is still room for improvement, which will be made as opportunity affords itself, but in order to accomplish the things necessary to perfect the sanitary conditions of the county there will have to be perfect harmony between the health officers and the physicians and the people of the county. The physicians, with few exceptions, do fairly well, but the few are the ones who cause the trouble, failing to report promptly or not at all, especially typhoid fever, which is new to them, and do claim that there is nothing gained by it.

There is a great failure in reporting and quarantining diphtheria, some physicians being loth to diagnose the disease properly, preferring rather to call it follicular tonsilitis, instead of giving the doubt in favor of its more dreaded twin sister, thus avoiding reporting, quarantining, etc., or from the fact that the man of medicine has been overcome in the enforcement of his precautions by those who are generally in "attendance" on the patient, who attach but little importance to a case of diphtheria and insist that it is not "ketchen," for they used to sleep with cases of it and never "took" it there. Self-constituted doctors are on the decrease, though, and the infusion of a little more nerve on the part of the attending physician will eventually result in their extinction, which will no doubt be the means of enabling us to more effectually cope with this formidable foe and to conquer it more readily.

Respectfully yours,

J. H. JUSTICE,
Secretary Board of Health of Hancock County, Ind.

HARRISON COUNTY.

CORYDON, IND., December 1, 1896.

By your request I have endeavored to arrive at the sanitary condition of our county by writing to physicians in the various parts of the county, but as yet have not received a reply from any except Dr. Wm. Moore, of Elizabeth. I have on record up to September 1, 1896, but fifty-eight deaths, which includes from September 1, 1895; yet this will not show the entire number of deaths for the past year. We have a population of at least 2,600, and this would not be a death rate of two per cent., which would indicate an extremely low death rate. The fault lies in the physicians not all making reports of births and deaths according to law. I find in comparing the number of deaths reported that fifty-eight deaths were caused, or the result of, twenty-eight different diseases, pneumonia, heart disease, consumption and Bright's disease causing by far the largest number. Usually we have a large number of deaths from typhoid fever, but of all the fifty-eight deaths reported only one from typhoid fever is reported. I think this is accounted for from the fact that during the last summer we had a large amount of rainfall. We also had but one death from flux (dysentery) and but two from cholera infantum, which also shows a small mortality for those two diseases, which are influenced or modified by the rainfall or water supply; but on the other hand we have had a very great increase of malarial fevers and persistent chills; also quite an epidemic of diphtheria, especially in the portions of the county bordering the Ohio River—to localize more especially, in Boone, Taylor, Posey and Franklin Townships, the latter of which does not border on the river, but has quite an amount of level land which is not well drained. Taking the locality, the great amount of rain, the deficiency of drainage and the absence of typhoid fever, flux and bowel troubles generally, we are almost forced to the conclusion that the scourge of diphtheria from which the above localities have been suffering so severely is due to some miasmatic influences which are developed under those peculiar weather influences and deficient drainage. A year ago we had quite a scourge of typhoid fever, very fatal in this locality, and in fact we had considerable throughout the county, but no diphtheria of any consequence, and, too, we had a different season which was favorable to develop typhoid fever, dysentery and all forms of bowel trouble.

I think the sanitary condition of the county is as good, if not better, than usual, as the Health Boards have been urging all parties to place their premises in good condition because of the diphtheria epidemic in the county.

I want to offer a suggestion in regard to the rules and regulations adopted by the Board of Health concerning the public schools. Did it ever occur to you that you should have two sets of rules, one for large towns and cities, and the other for the country districts. You take a large school in town or city that is graded or divided in several rooms consisting of 200 to 400 children, and then take a small rural school consisting of eighteen to thirty on the roll, and try to enforce all the rules that are intended for a city school and they all become so disgusted with the whole matter that they do not try to follow any. Hence I think there ought to be a set of modified rules which the director, Trustee and teacher will try to enforce. What would be necessary in city and town and could be enforced, would be useless in country and could not be obeyed. Therefore, I think it would be well for the Board of Health to consider the matter and adopt some simple, reasonable and

necessary rules for the country districts, not enact rules for towns and cities and then hope or expect sparsely attended country schools to fill the measure by obeying to the letter. All of which I respectfully submit,

Z. T. FUNK,
Secretary Harrison County Board of Health.

CORYDON, IND., December 3, 1896.

J. N. Hurty, M. D., Secretary Indiana Board of Health:

MY DEAR DOCTOR—Yours at hand and noted. As regards our poor house I will say that it is not as commodious as we would like and consequently, the care of the inmates is not just as good as it is in many similar institutions in the various counties of the State. Yet the inmates are kept comfortable, being supplied with plenty of plain food, such as meat, flour, beans, coffee, sugar, molasses, hominy, potatoes, dried fruits, etc. And one thing is furnished which I think should be discontinued, *i. e.*, tobacco. I do not regard it as a necessity, and it should not be supplied by the public.

We have, I think, eight cottages that are very plain, which are plastered and whitewashed, furnished with stoves and plenty of good, dry wood, so that all may keep warm. One very decided improvement has been made in the last year, *i. e.*, a drilled well. I think it is some over a hundred feet deep and furnishes an abundance of pure, cold water.

We have reported at this time twenty-eight inmates, mostly old and weak-minded people and persons unable to work, except light work around the house. Have had only one death in the last year, James McCollum, who died of Bright's disease. Health of the institution has been comparatively good in past year.

Our jail is not good from a sanitary standpoint. I have discussed the matter with the County Board and all are at a loss to know how to better it unless we had a sewer system. As it is, the privy vaults open into a dry cistern which is emptied two or three times a year; and most certainly where a vault leads into a cistern by a pipe, the foul gases will escape into the privy. And in this case the privy being connected to the jail, there can be no other help but to contaminate the air with the most foul emanations that can be generated in a most foul privy. Had our town a sewer system we could then empty the vaults and have all the safety valves that modern appliances furnish, but unfortunately we have no sewer system and very little hope of establishing one. We have four prisoners at present, fed by the jailor, Mr. Peter S. Wright. Hoping this may be sufficient on these two topics, I am

Very respectfully, ,

Z. T. FUNK,
Secretary Harrison County Board of Health.

HUNTINGTON COUNTY.

In regard to the sanitary condition of Huntington County I submit the following report:

Huntington County is traversed by the waters of the Wabash, Salimonie and Little rivers, besides numerous creeks, which afford convenient outlets for drainage. When the county was sparsely settled, a great deal of swamp land was interspersed over the flat portions lying between the rivers. In those days malarial

diseases were rife, but since the lands have about all been well drained, malarial diseases to any excessive degree have been exceptional.

Typhoid fever, however, is the king of the diseases now in these sections, and for what reason one can only conjecture.

Diphtheria has been epidemic in several rural districts during the last year, which has not been the fact for several years. It seems to occur largely in a mild form, with a few malignant cases intermingled and but a small per cent. of deaths. In every epidemic the township officers and teachers of schools have promptly and willingly aided in quarantining and in disseminating knowledge in regard to its contagious character and means of abating it.

No other diseases of epidemic nature have been conspicuous in the county.

Death reports still indicate a large proportion of cholera infantum during the summer months.

The whole number of deaths reported from all causes during the year was 246, of which consumption should be credited with 32; cholera infantum, 30; scarlatina, 2; typhoid fever, 15; diphtheria, 12—total, 91.

This statement of reported deaths from preventable diseases shows that nearly fifty per cent. of all deaths were from those diseases. Respectfully submitted,

CHARLES L. WRIGHT, M. D.,
Secretary Board of Health for Huntington County.

JACKSON COUNTY.

SEYMOUR, IND., December 10, 1896.

I have been slow in making my report for year ending September 30.

The health of this county has been fairly good for last year. There has been all over the county a disposition for the children to have sore throat, a slight inflammation of the fauces and tonsils. Yet diphtheria did not develop to any amount until after September. Now there is diphtheria almost all over the county. I have closed the schools in Driftwood and Carr townships for an indefinite period.

The jail is in a good sanitary condition. There have been no deaths in jail for a year.

I visited the county poor house and found it in good condition. There have been three deaths in county poor house since my last report, to wit: John Johnston, February 24, 1896, aged 65 years, lung disease; James Richardson, August 17, 1896, aged 45 years, died of general debility; Christian Egerty, aged 72 years, died October 22, 1896, of heart disease. There has been one birth, October, 1896; mother, aged 36 years, not married. Any more information in regard to Egerty or Johnston you will find at the House of Charity in your city. There are twenty-two patients now at poor house, to wit: Seven males and fifteen females. They are well looked after by the Superintendent.

In my December report I will give the condition of health, especially in regard to diphtheria.

I am respectfully,

J. H. GREEN, M. D.,
Secretary of Board of Health of Jackson County, Ind.

JAY COUNTY.

The sanitary condition of Jay County is an average condition. The number of deaths reported up to the first of November, 1896, is 130. This, of course, is not all the deaths, for the physicians do not report their deaths with any degree of accuracy and never will under the present law for the collection of vital statistics. We have had up to November 1, 110 cases of diphtheria with seventeen deaths reported, but here again the death reports are not complete. The epidemic has been, as a rule, under fair control, this number of cases being the whole number for the year, and there has never been—with the exception of Red Key—more than eight or ten cases at any one time. The City Boards of Health (Red Key and Portland, especially) were a little slow to act, and for this reason the epidemic gained a firmer hold than it should. Now the cities having diphtheria have their boards reasonably well organized—they could be better—and enough sanitary police to enforce quarantining. Doctors themselves are responsible in large measure for the spread of a disease like diphtheria. They fail to report mild cases; they visit patients and families indiscriminately, without changing clothes; they seldom wash their hands and face or disinfect their clothing; they allow families to visit back and forth; they send children on errands, and other derelictions too numerous to mention. This can only be remedied by a crusade of education. Let it be held up full in the face of every practitioner of medicine that every contagious disease can be prevented, and that its spread is only the result of somebody's negligence, and that such negligence is criminal. The efforts of our eminent Secretary of the State Board should be highly commended and given unreserved assistance in every particular. There have not been many cases of typhoid fever in Jay County this year. There have been but few cases reported, and, to my knowledge, there have not been a great many deaths. I think the per cent. of deaths would be lower for this year than for last.

We have now in Jay County for an infirmary building a modern brick structure with the most modern sanitary fittings, heating, etc. The number of inmates averages about thirty-five or forty, as a rule, in poor health, of course, from old age and congenital maladies, epilepsy, insanity, etc.

The frame school buildings are fast disappearing and in their stead arise substantial brick structures, with proper seats, good light and ventilation, good water, and, in short, all that could be desired for a country school. The city school buildings are also modern in their sanitary arrangements. They have been, during the recent epidemic in Portland, thoroughly disinfected and fumigated.

The jail in Jay County is not in a good sanitary condition, but as good as the building will permit. The remedy is a new building. Respectfully,

M. T. JAY, M. D.,
Secretary Jay County Board of Health.

JENNINGS COUNTY.

PARIS CROSSING, IND , November 17, 1896.

In reply to your request through circular, I will say as regards the health and sanitary condition of Jennings County for the year ending September 30, 1896—"good." There has been some typhoid fever, but not of a malignant form.

Diphtheria prevailed in some parts of the county and proved fatal to some extent. The doctors took all precautionary measures to stamp it out, and did through *strict quarantine*; prevented it from assuming a general epidemic. I am thankful to the physicians of the county for their cheerful aid in carrying out the rules, etc., of the State Board. But with all that, I am sorry to say, the physicians' reports are incomplete in the county, and how to remedy the same I am really at a loss to know.

There have been needed improvements made to the county jail.

Thanks to our County Commissioners the county asylum is kept clean and always in good sanitary condition.

Water works have been built at Vernon this year.

Our School Superintendent is a man up to the times, looks after the welfare of the children and sees that the Trustees keep the schools under their care well ventilated and strictly clean, carrying out all sanitary rules as made known to them.

I have tried to the best of my ability to fulfill all your instructions.

Yours respectfully,

JAMES L. HANNA, M. D.,

Secretary Jennings County Board of Health.

JOHNSON COUNTY.

FRANKLIN, December 5, 1896.

The general health of Johnson County for the last year—1895—has been very good. With the exception of an epidemic of typhoid fever in Clark Township we have had very little sickness. A few cases of scarlet fever, some cases of diphtheria and measles are all, none of which was to the extent to be called epidemic. The epidemic in Clark Township was caused by the use of impure water.

Orphans' Home is in good sanitary condition. There are nineteen inmates, all well. Has been no deaths. Our jail has two inmates. No deaths. Is in a very good sanitary condition.

Our poor house is well-kept by David Swift, and is in a good sanitary condition. There are twenty-four inmates. Have been two deaths. General health is good.

The County Commissioners of our county are entitled to much credit for the able and ready assistance rendered us during the last year, as well as the local Board of Health, in adopting and enforcing the laws of the State Board of Health.

The physicians of the county have done excellently this year in making their reports of deaths, births and contagious diseases. There has seemed to be a desire on the part of some physicians to use the emblem of death in case of diphtheria, but I believe they are getting over that to a great extent.

W. C. HALL,

County Health Officer.

KOSCIUSKO COUNTY.

Almost the entire area of Kosciusko County is of a sandy, rich loam, over a bed of gravel four to fifteen feet, the dividing ridge as to the general directions our water courses flow. Tippecanoe River has its source from Tippecanoe Lake in Tippecanoe Township. The river or outlet at the south end of the lake mentioned traverses the county in a southwesterly direction; completing its meanderings, it has a thirty-five mile run before passing from Kosciusko into Fulton County.

Not more than five miles west of Tippecanoe Lake we find Wawasee Lake, of some one and one-half miles area. The outlet of this lake commences as a small creek, and the general direction of this water-course is north and northwest, until it empties into Elkhart River and thus on to Lake Michigan, increasing in width and depth as junction is formed in other rivers. This admirable water-course, with its many tributaries, supplies drainage that could not be improved.

Artesian or flowing wells are quite common throughout the county—secured at a depth of from 75 to 200 feet.

This county, thirty to forty years ago, I am informed, was reported to be the greatest nest-egg to hatch out and breed malaria of all the sister counties surrounding it, on account of a large area, mostly located in the northwestern portion of the county, of what was then known as swamp land. To-day it is the most valuable, made thus by an intelligent system of open ditch and tile draining. It is estimated that \$2,000,000 have been expended in the prosecution of this work in the thirty-five or forty years past. Ague or chills and fever are no longer known, unless it is a season of unusual midsummer drought, followed later by excessive rain-fall, then by the hot August and September sun, bleaching and rotting the vegetation. Such physical conditions do not occur more than once or twice in each decade.

The county has a number of very fine lakes, most of them being fed by springs, having no inlet. Parks are numerous about these lakes and afford many attractions for those in pursuit of pleasure. Among the beautiful lakes and summer resorts there are none more attractive to the pleasure-seeker, nor more healthful to the invalid, than Winona Park, on the banks of Eagle Lake. Here the weary and careworn may find rest and means of recuperation with change of scenery, and drink from the sparkling springs with their health-giving waters, fresh and pure from nature's hidden realm, and roam through forests of maple groves and wooded lawns, where the rippling brooks and the bubbling springs, the fragrant roses and the dainty flowers, the shaded walks and the vine-clad arbors, beneath whose balmy canopy the children love to stroll and play while the zephyrs sigh with the passing hour, and drink in the healthful atmosphere, laden with the sweet-scented fragrance from numerous gardens of flowers.

Regarding the present sanitary condition of the school buildings in the city of Warsaw, consisting of East, West and Center wards, I report as follows: The school buildings are all of brick, the East Ward two stories high, with four rooms, the West Ward two stories and five rooms. Both buildings are heated by hot-air furnaces from floor and side wall registers. Cold-air flues in each building, but on account of being built remote from the smoke chimneys and not receiving any warmth, are stagnant until the flues become warmed by the hot air generated in the hot-air compartment of the furnaces; the ventilation, however, is sufficient ordinarily to render the atmosphere fairly pure. The water used at both

East and West wards is supplied from ordinary wells, cased with brick, and drawn by pumps. The platforms are kept in good condition and the wells free from any liability of filth or waste water flowing into them. These ward buildings are supplied with outhouses, which are well constructed over vaults built of brick, of a depth of from ten to twelve feet, and in a fair sanitary condition. There are two outhouses to each building, for males and females. The well at the East Ward is about 200 feet from the outhouses. The well at the West Ward is, perhaps, too near the outhouses, being only about twenty feet. All of the closets are kept clean, being regularly disinfected by use of proper material once or twice each week. The character of the soil at the East Ward is yellow or brown soil of sandy nature, with gravel sub-soil. At the West Ward it is blue clay from surface to a depth of thirty to forty feet. The depth of the wells is thirty to forty-five feet, respectively. Depth of water, from five to thirty feet; the greatest depth occurring when the rain-fall is of unusual extreme quantity.

The Central Ward, in which is the city High School building, is a two-story brick building with basement and twelve rooms; is heated by steam, direct radiation, by condensed radiator and pipe lines against the walls. This building, being originally constructed to use hot-air furnaces, is ill supplied with any modern system of ventilation, relying wholly on the old register openings in side walls connecting with chimney flues and when the rooms become overheated to lower the windows from the top, resulting often in suddenly lowering the temperature of the rooms several degrees. The building is supplied with a system of water closets and urinals in the basement, operated by direct flushing from the pressure of the city water works and provided with connection with city sewer. In these closets and urinals disinfectants are used sufficiently to render them in a fairly good sanitary condition; but yet there is room for much improvement in this direction, as the works are needing repairs, especially in the male department, where urinals are used.

The county of Kosciusko has an area of 592 square miles, divided into seventeen civic townships. The number of school houses built and maintained in such townships is from eight to fourteen; the total number in this county is 176. The sanitary condition of a few of these older school houses is, perhaps, not up to the required standard in a hygienic and sanitary point of view. Then, again, to the credit of the intelligence of a greater per cent. of our township trustees, supported by intelligent public sentiment, the later day buildings are provided with more modern methods or systems in the construction of the school buildings. The towns of the county, especially, have good school buildings, having been erected with a view to correct sanitation, and I have no doubt but those in authority will take pride in enforcing the special rules established by the State Board in Health Circular No. 4, in this manner rendering the rooms healthful, pleasant and attractive to the teachers and pupils.

The water used at a large per cent. of the school buildings is obtained from wells encased with brick walls, plank platforms; water being drawn by pump. A great many have the benefit of water from driven galvanized pipe, thus eliminating the possibility of impure water.

The county jail is a stone structure and is built with a view to late sanitary improvements, being supplied with facilities for closets and urinals connecting with city water works, and sewerage cleansed by direct flushing; heated by steam; hot and cold water; lighted by gas; iron bedsteads. The rooms are scrubbed with disinfectants once to twice a week. The plumbing at the present, December, 1896, is in first-class condition, and I should regard the general sanitary condition as entirely free from adverse criticism.

Our County Commissioners have taken great care in preparing a suitable and convenient home for the poor of the county, as is evidenced by the very handsome and modern county infirmary, recently built at a cost of some \$33,000.

It is a model building for the purpose, being built of brick, and possessing late improvements and appliances for a most thorough system of ventilation, with closets and urinals, hot and cold baths, pure water for drinking and culinary purposes; also, soft water in abundance. All cells for confinement of deranged and dangerous lunatics are so provided with appliances that all offal and filth can be flushed from floors—of stone—and by drainage into a series of troughs or pipes to connection with sewer. This building has its own independent water supply, secured by the Neff patent pump, with a reservoir containing on an average 600 barrels of water, thus affording good fire protection.

The building is also provided with electric incandescent lamps, battery and dynamos operated by engine and power in separate power house from main building. The building is heated by the Kutz hot air furnace, foul air shafts and flues being provided, securing as perfect sanitary condition as may be found in any modern building of this character.

The grounds about the buildings are well-kept. The drainage is good, and the inmates being well cared for, there is very little sickness and no epidemics of any kind, hence the mortality here has been very small as compared with the average number of inmates.

The court house is of modern design, built of stone, supplied with water from city water works and heated by steam. The closets and urinals are in fair condition. Disinfectants are used freely and the floor scrubbed frequently, so that the odors emanating therefrom are reduced as near as possible to a minimum.

The streets and alleys of the towns of the county are kept reasonably clean. Especially is this condition noticeable in Warsaw, the county seat, where every precaution is observed that there be as little accumulation of rubbish in the streets and byways as is possible.

It is a noticeable fact that Warsaw is now—and has been for a number of years past—free from the epidemics usually prevalent at some time of the year in places of its size.

This fortunate condition is doubtless attributable to the pure water and absence of accumulated filth, coupled with a due regard to good drainage and the close observance of sanitary laws.

T. J. SHACKELFORD, M. D.,
County Health Officer.

LAGRANGE COUNTY.

In response to your letter of inquiry, I have the honor to state that the sanitary condition of our county is generally good.

The towns of Lagrange, Lima, Wolcottville, Topeka and Shipshewana bear that indorsement. The latter town seems to have had, for the last two years, a monopoly on measles—as she used to have on diphtheria. But I am glad to say, as to the latter disease, there has been but little of it in the county anywhere, in the past year. Sporadic cases of scarlatina, to the number of four, were reported at Wolcottville, in October, 1893, and two in Lagrange, in May, 1896. As before said, measles at Shipshewana were plentiful.

In South Milford—a very small town in the southeastern part of the county, on the Wabash Railway—several cases of typhoid fever were reported in September, with two deaths. The summer was very warm, with frequent rains.

It was reported to me that in that town were many foul pigsties and privy vaults, which were no doubt the cause, poisoning the atmosphere and percolating the soil and rendering the drinking water impure. I have not been able to get from any physician his opinion. Dr. John Dancer died there in October from heart disease after seeing those cases. His death had no connection therewith, but deprived me of any official report as to the cause or existence of the fever.

I have not been able, from my prolonged sickness of five weeks, to visit every town in the county, as I had intended to do, but I issued orders to all persons there to clean up pigsties and privy vaults, and deodorize the same. I am glad to say that nearly all physicians in the county co-operate with me in my efforts to control contagious and infectious diseases.

Our county jail, county infirmary and Rogers' Orphans' Home have always been kept in good sanitary condition since my knowledge of them, which has been five or six years.

I try to keep watch over everything public connected with sanitary matters. I would again make the suggestion that the Legislature fix the salary of County Health Officers at ten or twelve dollars for every one thousand of the population of each county, limiting the amount to be paid, however, in all counties having a population of over 40,000 or 50,000. That County Health Officers be appointed—as now—by the County Commissioners, who shall also allow them, for all necessary traveling expenses—in the county—on health office business, and for stationery and stamps, from ten to twenty-five dollars per annum.

I think a Secretary in each county, elected by the Commissioners, will make health officer work—as now—more efficient than the plan suggested of associating with him another physician, and also a lawyer or business man, making a Board of three. What is everybody's business then will be nobody's. The present plan is good enough, properly carried out by County Secretaries.

I trust my opinion may have some considerable weight with the Legislature of Indiana, and yourself also. Very respectfully,

FRANCIS P. GRIFFITH, M. D.,
Secretary Lagrange County Board of Health.

LAWRENCE COUNTY.

In regard to the sanitary condition of Lawrence County, will say that it is fair, considering the topography of the county, which I think has something to do with public health. We have east fork of White River and Salt Creek, whose valleys, with their tributaries, form quite an area. The low water and extra growth of weeds contribute to malaria. The uplands in part of the county are undulating. Many natural ponds which also add to the tendency to malaria. While malaria has not the force it had in former years, it would not be so detrimental if the necessary weed destruction was attended to, especially in Mitchell and Bedford, whose city governments could enforce such, if they would. Mitchell is not so bad as Bedford, and, as a consequence, we have malaria in our city (Bedford) playing with some of our patients as complications.

Diphtheria is subsiding, having only one case up to present writing in this city. We have had no deaths from typhoid fever in 1895—*so reports say*—but I am inclined to say that this is not correct, judging from the imperfect reports from physicians, which imperfection comes from neglect and a refusal to report. Pardon me for the remark, but it looks like an attempt at advertisement when they show some interest in the number of births attended and a disposition to smother death reports.

The total number of deaths in 1895 was only ninety-four for all diseases; of this number fourteen were from diphtheria, for the whole county, which seems small.

The condition of poor asylum is very good, considering the arrangement of building, etc., but think it would be much better and safer if building was heated by furnace and had a bathroom, and that the old wooden bedsteads should give place to iron ones.

The jail is in a very fair condition, probably first-class for the kind of occupants, but has been condemned by grand jury as not properly ventilated, and has not a good water closet. Sheriff doing the best he can with the arrangement of building.

Upon the whole, we think that the sanitary condition of county, etc., while not in advance of, compares very fairly with other counties with a like topography.

Yours, etc.,

F. S. HUNTER, M. D.,

Secretary Lawrence County Board of Health.

MADISON COUNTY.

I beg leave to submit the following report as Secretary of the Board of Health of Madison County, Indiana.

The general health of the people of Madison County for the year 1896 has been exceptionally good. The number of births for the year has been very large, and the death rate very low. The number of reports of contagious diseases is quite large and is due in a measure to the fact that all cases of sore throat are looked upon as suspected cases of diphtheria. Antitoxin has been used in most cases with good results, yet there are many cases treated by other methods. Some families are too poor to buy antitoxin, others will not permit its use. We have had some trouble with Christian Scientists, who will not call a physician to attend their sick.

All the records of the County Board of Health were destroyed by fire February 15, 1896.

The sanitary condition of all the public buildings under my jurisdiction is good.

Births, 1,012. Deaths—Diphtheria, 28; tuberculosis, 25; typhoid fever, 18; pertussis, 5; measles, 8; scarlatina, 3—total, 307. Contagious diseases reported—Diphtheria, 192; scarlatina, 35; measles, 90; typhoid fever, 24—total, 343.

Very respectfully,

ED. W. CHITTENDEN, M. D.,

Secretary Madison County Board of Health.

MARION COUNTY.

INDIANAPOLIS, IND., December 1, 1896.

In reply to your letter of recent date, I wish to say that the health of Marion County has been good during the last year.

There has been considerable typhoid fever, and some diphtheria and scarlet fever, but nothing approaching anything like an epidemic of either disease. Under the watchful care and intelligent supervision of our City Sanitarian, Indianapolis has been placed in a much better sanitary condition, thus proving the wisdom of having such an officer in the larger towns and cities.

I have recently visited most of the public charitable institutions located in this county, including those of the State, and find most of them in good sanitary condition. In my opinion, the water supply of all of them is now first-class, and the sewerage and ventilation are fairly good, so far as I could determine. There has been no unusual sickness in any of them during the year. The Indiana Institute for the Deaf and Dumb and the State Institute for the Blind are both in good condition. The sanitary condition of the Central Hospital for the Insane has been very greatly improved under the efficient management of the present Superintendent, Dr. Geo. F. Edenharter.

The county court house is in good condition, sanitarily, except the basement, now occupied by the city offices, the ventilation and lighting of which are susceptible of very decided improvement. The county jail and work-house are both in good sanitary repair.

The county poor house is the only one of the public buildings which suffered from fire during the year—and that, we hope, will prove a blessing in disguise, as the new building nearing completion, which has been erected to take the place of the wing destroyed, is a palace in comparison with the old one. There is great reason for thankfulness that this fire occurred at midday, and in midsummer; for if it had been late at night there would probably have been many lives lost. And if it had been cold weather, great suffering would probably have resulted, by reason of the necessary overcrowding. As it was, no lives were lost, and the sanitary conditions will be much improved. That portion of the old building which was not burned is not in as good condition as is desirable.

The ventilation is poor, and, in my judgment, there is great danger of fire in its present arrangement. Everything, however, is as clean and well-arranged as could be expected in the present crowded condition.

The city hospital, with its increased capacity, and the orphan asylums and the other charitable institutions of the city, so far as I know, are in good order.

The school buildings of the city and county are in very good condition. Some of the buildings in the country districts are old, and it is hoped will soon be replaced with new ones, supplied with modern conveniences, and arranged with a view of conserving our children's health, as well as storing their minds with useful knowledge.

As to the matter of births and deaths, I wish to say that while we are receiving more reports from outside the city now than at the beginning of the year, yet I am satisfied that a very large per cent.—probably one-half—are not reported at all. I have written personal letters, and mailed copies of the rules of the State Board of Health, and copies of the paper in which the rules were printed for promulgation, to each of the sixty doctors practicing in Marion county, outside the city of Indianapolis; but the fact remains that a very large per cent. have wholly ignored

them. In my opinion, the only way in which the State Board of Health can secure anything like accurate vital statistics of the State, is through the County Health Officers. As a general thing, I believe the cities and larger towns get quite accurate reports; but throughout the country districts, failure to report is the rule, so far as my experience goes. In my opinion, there is no excuse for such a state of affairs. This is an important matter, and physicians should be compelled to report—and that promptly, too.

The county records of births and deaths as they are returned in this county outside the city and one or two suburbs, are almost useless for all practical purposes. If the Legislature could be induced to pass a law defining more explicitly the duties of county health officers and clothing them with authority to compel physicians and local health officers to report to them promptly, with power to enforce the penalty for neglect, backed by the positive assurance that they (the county health officers) shall suffer the penalty prescribed for failure on their part to do their duty, it seems to me that with such a law as this (fixing the responsibility on certain officers) the majority of *births* would be reported. And if a heavy penalty was attached for the burial of any body within the State without a burial permit, to be issued by a properly qualified officer after he has been provided with the death certificate, properly filled out by the attending physician (or county coroner in cases where no physician has been in attendance), this local officer being required to keep a record of all certificates furnished him and, within the first five days of each month, forward the original blanks to the county secretary in which county such deaths have occurred. And if undertakers were required to keep a record (say at least the name and place of death) of each person buried by them, being careful to designate the county, and forward this to the county secretary on the first day of each month, for comparison with the reports of local health officers, I believe a record of every death in the State could be secured. The clerk of the county should be responsible for the proper return of records of marriage certificates to the county secretary.

I have no hope of securing accurate returns under the present law.

I am very respectfully yours,

A. L. WILSON, M. D.,
Secretary Marion County Board of Health.

MONTGOMERY COUNTY.

CRAWFORDSVILLE, IND., December 17, 1896.

In compliance with your request I will make my report for the year 1896. The sanitary condition of this county for the year 1896, so nearly ended, has been fairly good. We have had more typhoid fever than for years, and while it has prevailed more extensively in southern parts of the county, still it has been more general over the whole county than usual. The towns of Ladoga and Waveland, with country surrounding each, have not been free from typhoid epidemic every summer for the last ten years, which, I believe, is attributable to the fact that they use water from shallow wells, being in most instances surface water, but they are putting in a great many driven wells through that part of the county. I shall expect less infection from that source in the future. One family, Mr. Jesse Stillwell,

some twelve miles southwest of this place, had four cases of typhoid fever in August or September, with one death. I sent you a sample of the water from the well which they were using, and you reported it unfit for use. I ordered all the water drank after that to be sterilized, and the result was that the balance of the family recovered.

The county asylum, orphans' home and jail are all in, or nearly, a perfect sanitary condition, as is also our public school buildings. The water supply for Crawfordsville is from pure spring water, and with the exception that the pool is open and exposed to dust from passing travel it is all right. I have advised that the pool be inclosed in such a way as to exclude all contamination from without, but as yet have not succeeded. We have had a few sporadic cases of diphtheria and scarlet fever, but nothing further, as we have endeavored in every way to maintain a strict quarantine in every case that has come to our notice.

E. M. KEEGAN, M. D.,
Secretary Montgomery County Board of Health.

NOBLE COUNTY.

ALBION, IND., December 10, 1896.

The sanitary condition of Noble County for the year just ended is good, with few exceptions. Our public buildings, court house, county jail and infirmary, are kept in first-class sanitary order; good ventilation, well lighted, warm and comfortable all the year.

I have not visited all the school houses in the county, but learn from the County Superintendent that they are all in good condition, with one or two exceptions. None have been closed by reason of infectious diseases.

In my request for a report from the health officers of incorporated towns and cities only one report was received, and that from Dr. W. K. Mitchell, of Ligonier, whose partial report is as follows: "Our school buildings are well kept. The river is not polluted, and no stagnant water exists anywhere. One objectionable condition exists from slaughtering poultry, with other filthy accumulations. The drainage of the city is good."

Kendallville health officer made no report.

Avilla, an incorporated town of six or seven hundred inhabitants, has no health officer.

Albion health officer made no report.

I have visited Kendallville, Ligonier, Cromwell, Avilla, La Otto, Wawaka, Rome City and Brimfield during the past year in the interest of sanitary work. In the towns not incorporated and under the care of Trustees I found the most need of sanitation. The Trustees are absolutely helpless to enforce any rules of sanitation without the aid of the County Health Officer.

Forty-three cases of typhoid fever have been reported, with five deaths, and the sanitary surveys sent to your office. Eternal vigilance is the price of these reports. Doctors, with all their warning in every letter from this office to them, would often forget to report some cases. Rome City had eleven cases, with three deaths. Kendallville, one case. Albion, eighteen cases and one death. Avilla, one case. The other twelve cases were in the surrounding country, with one death.

Water from three wells in Albion, that was thought to be the source of infection of several cases, was sent to the Secretary of the State Board of Health at Indianapolis for examination, in which no typhoid bacteria was found, but which was contaminated with organic matter enough to condemn the water for domestic use.

Diphtheria appeared in Kendallville—a few cases, with some deaths—but none have been reported at the present time. There have been several cases of scarlatina at Ligonier, with only three cases reported, and no deaths.

The County Board of Health concluded at their last session it would create an interest in the Health Officers to enforce the sanitary rules of the Board, promulgated as directed by law, to call a meeting of the Health Officers of the county and confer with each other in reference to the needs of sanitation that came under their notice during the year. A meeting was called December 9, 1896, and held in the teachers' examination room in the Court House, and citizens that were presumed to be interested in sanitation were invited. The interest shown by those in attendance was beyond our most sanguine expectations. Every Trustee, School Board and corporation Board in the county was present except two. It was honored by the presence of Dr. J. N. Hurty, Secretary of the State Board of Health, and Professor Burrage, Professor of Sanitary Science, Purdue University, editors, ministers, lawyers, doctors, teachers, farmers, business men, and the scholars from the Albion High School, accompanied by their able and efficient Superintendent, Professor Fox. Dr. Hurty gave us some interesting figures, showing the enormous loss financially to the State of Indiana each year from typhoid fever alone, which is now classed among the preventable diseases, and how the death rate could be reduced to a minimum by proper sanitation. Also a new device for destroying disease germs and disinfecting rooms that contain infection. Also, showing a complete outfit for Health Officers and physicians to wear when visiting a patient with a contagious disease. Professor Burrage gave illustrations of the kind of bacilli found in water used for domestic purposes, and how it was often polluted with organic matter from insufficient drainage; also, what was being done in the State University to educate the people of our State in the recent discoveries in sanitation. We found farmers and business men manifesting much interest by asking as many questions in sanitation as the professional men, and by remaining until a late hour. I think the meeting will mark an epoch on the subject of sanitation in Noble County.

In conclusion I must confess that my experience as Health Officer during the past year has convinced me of the need of new legislation, new methods of collecting reports, and placed in the care of officials that are interested in the health and welfare of the public and will do their duty, and, behind all this, backed by an intelligent public sentiment that will not be withheld if presented in a proper manner.

Yours truly,

B. E. MILLER, M. D.,
Secretary.

OHIO COUNTY.

RISEING SUN, November 14, 1896.

In reply to yours of the 4th inst., requesting me to give you the sanitary condition of Ohio County for the last year, ending September 30, 1896, will state that it has been good. The county asylum and jail are both in good condition. The inmates of the asylum are in good health and satisfied with their home. All other public buildings in the county, as far as I can learn, are in first-class condition. The health of the people has been good, with the exception of diphtheria and measles. Measles prevailed as an epidemic during last fall and winter. A few cases of diphtheria were reported, and two deaths. The deaths from known causes are as follows: Meningitis, 1; diphtheria, 2; apoplexy, 1; tuberculosis, 3; typhoid fever, 2; pneumonia, 6; old age, 2; heart disease, 7; dropsy, 1; measles, 3; paralysis, 2; umbilical hemorrhage, 1; softening of brain, 1; morbus coxalyia, 1; drowning, 1; inflammation of brain, 1; rheumatic endocarditis, 1; debility, 1; peritonitis, 1; perforation of bowels, 1; obstruction of bowels, 1; membranous croup, 1; chronic diarrhœa, 1; blood poisoning, 1; congestion of brain, 1; gun-shot wound, 1; unknown, 1. Total, 46.

Respectfully,

G. A. STEVENSON, M. D.,
Secretary Ohio County Board of Health.

OWEN COUNTY.

I beg leave to submit the following report of the sanitary condition of Owen County, Indiana, for the year ending September 30, 1896:

The county asylum is in good sanitary condition. The building is of brick, with large, ventilated rooms. Recently bath tubs have been put in, and a large room, with plenty of sunshine, has been set apart for a hospital ward, where the sick are taken, treated and cared for during their illness.

The water supply is pure. The house is heated by stoves. In the near future, probably, a furnace will be put in, which will add materially to the health and comfort of the inmates.

The jail is old, cells are small and badly ventilated; but little sunshine can penetrate the building, making the sheriff's residence adjoining very unhealthy. During the past year it has been necessary, in order to save life, to ask the Court's permission to remove sick prisoners from the jail until they recovered. Judge Grubbs has cheerfully allowed this to be done.

The public school building of Spencer is in a healthful condition, but the rooms are overcrowded. The whole building is heated by a furnace. The water supply is from an artesian well 1,100 feet deep, adjoining the school property, and is pure and healthful.

The water of some of the county schools is not good, a great many being supplied from shallow wells and springs and from questionable sources, though I know of no outbreak of any disease that can be traced directly to these wells and springs. Before schools opened in the fall I directed all School Directors and Township Trustees to have the wells and springs thoroughly cleaned out, and when there was any suspicion as to its purity, to boil it before using it for drinking purposes.

Four miles northeast of Spencer, at Romona, where there are large oölitic stone quarries, and where practically all the laborers live, there has been, from time to time, severe outbreaks of typhoid fever. These cases, I am satisfied, can be traced, in a large measure, to a public well and adjacent springs, from which nearly all use for drinking and other purposes. Near the well and springs are surface water closets. From time to time the attention of some of the operators has been called to this matter, and Mr. Walter Kessler, operating one of the largest plants there, has recently informed me that it is his intention, as soon as possible, to sink a deep well, through hard pan, which is absolutely impervious from any contamination from above. Recently I sent a sample of this water to Dr. J. N. Hurty, Secretary of the State Board of Health, for analysis and microscopical examination, who sent me the following report:

"I find said sample to be abominably polluted. This is shown by the chemical evidence, which is overwhelming, and the bacteriological tests discover the presence of innumerable intestinal bacteria—it is a menace to public health."

I immediately had the well closed, and people warned not to use water from the well or springs until arrangements could be made for pure water. In the meantime the citizens are using river water, after being boiled, for drinking purposes. The large number of cases of typhoid fever among the inhabitants of that small village, beside other cases near there who are known to use the same water and who were stricken with typhoid fever, proves conclusively that the people there have been literally drinking human excreta for years, washed in from water closets and other sources surrounding there. When deep wells are put down below hard pan and arranged so as to admit of no surface drainage, I am satisfied typhoid fever and other gastro-intestinal troubles will practically cease.

During the past autumn there has been an outbreak of diphtheria and scarlet fever in different parts of the county; notably, diphtheria at Coal City, Patricksburg and Arney—all in the western and southwestern parts of the county. There have been four deaths from this disease.

I visited all the infected localities, and by enlisting the leading citizens in the different localities, and by the hearty co-operation of all the physicians; notably, Drs. Richards and Sloan at Patricksburg; Drs. Hinkle and Vanhorn at Coal City; Dr. Yocum at Arney, the disease has been kept well under control, so that now there are but few cases developing, and these are generally mild.

I was called to visit a case in the practice of Dr. Hixon, of Farmers. Some of the pathological specimens from the throat of this patient were sent to Dr. J. N. Hurty, Secretary of the State Board of Health, for culture and microscopical examination, and who kindly sent me the following report:

"The tube from Dr. Hixon arrived. The growth was well advanced and ready for examination. It shows a mixed infection. Very few true diphtheria germs were found. The strepto-cocci were superabundant. This strept-diphtheria is as dangerous as the true article and should be treated in the same way."

In all these cases of sore throat, mild or otherwise, isolation and quarantine, strict antisepsis among all physicians and nurses was enjoined.

Notwithstanding all these precautions by the attending physicians and the Secretary of the Board of Health it has been almost impossible, in some instances, to enforce the rules of the State Board of Health and impress the people in the vicinity and infected families with the gravity of the disease and the great danger to life.

A full report of this epidemic, which has nearly all occurred since September 30, 1896, will be given in my next report.

There has been reported to this office, from September 30, 1895, to the present time 60 deaths in all; typhoid fever being the cause of 16 deaths, diphtheria 1, out of 19 cases reported; pneumonia, 8; influenza, 4; tuberculosis, 8; cancer, 4; malarial fever, 2; cerebral meningitis, 5; cholera infantum, 3; organic diseases of heart, 4; dysentery, 1; locomotor ataxia, 1; accident, 2; abscess of liver, 1; nephritis, 1; senile diarrhoea, 2; arsenic poisoning, 1; malnutrition, 1; suicide 1.

I am satisfied that this does not give the total number of deaths, probably by one-half, but it is the best that can be done under our present health laws. As I said in a former communication there is a limited number of physicians who seem to labor under the false notion that any death that occurs under their care is a reflection on their skill, hence they fail to report deaths that occur in their practice. They are anxious to report a large obstetrical record. As a general rule births, marriages, infectious and contagious diseases, are promptly reported. And when the people understand it, are anxious to aid Health Officers in arresting all infectious diseases and are in favor of a vigorous enforcement of all health laws.

I trust that the coming legislation will, without delay, enact a public health law that will prove to be as good, if not better, than any State in the Union. Our great State deserves it. The people demand it, and our law-makers will be held responsible for the least failure in this important matter. There should be heavy penalties for any violations, and sufficient revenue should be collected and appropriated for its proper enforcement. The laws should be so enacted that no interment should be allowed until a burial permit is granted by some one having authority. By this means a true record can be made of all deaths, and in case of infectious or contagious diseases private funerals can be enforced, many lives saved and much suffering and expense avoided. We boast of our magnificent school fund and common schools, as justly we may. Our colleges and universities are second to none. The care of the unfortunates of our State is the pride and boast of our citizens. Large sums of money gathered in taxes for the maintenance of our universities, charitable and penal institutions, are cheerfully paid by the people of our commonwealth. Can we not have a public health law, written and enacted into our statutes, broad and strong enough to protect the lives of our citizens?

NATHANIEL D. COX, M. D.,
Secretary of Owen County Board of Health.

PORTER COUNTY.

In compliance with your circular letter of recent date I here submit my report ending October 31. With the exception of diphtheria, which has prevailed in several localities, the inhabitants of Porter County have never been more free from epidemics or enjoyed any better health than during the past year. I attribute the cause to most of the low lands being drained and tiled, and the people are fast learning the truth that it is much easier to prevent disease than it is to cure it.

The school houses in the county are in good condition, well ventilated and good lights. The County Superintendent saw that each building was well renovated and inside walls whitewashed before the fall term of school began.

The sanitary state of the outhouses are as good as can be had of the kind. Valparaiso Columbia School is a fine brick building of modern architecture, well lighted and ventilated; with all the modern conveniences; sanitary condition.

good. The Central High School building is of old style, and very poorly ventilated and lighted. Some of the rooms not only being poorly lighted the students have to receive the light from the side and partially in front instead of it coming from the back as it should. I think a great many pupils have their eyes injured by that means. With the above exception the sanitary condition is fair. The water supply of our city school comes from the city water works. The country schools are supplied by wells.

The Northwestern Indiana Normal, located in Valparaiso, with an average attendance ranging from 1,000 to 2,500, is exceptionally well managed in point of sanitation. Prof. O. P. Kinsey takes special care and sees to it that everything is kept in order, and the health of the students is first-class, and the buildings are all kept in good order. Our public buildings are all kept in as good condition as it is possible. The county asylum is an old wooden building, and very difficult to keep in first-class order, but the Superintendent for the Poor is entitled to much praise for his management, as the asylum is kept scrupulously clean, both outside and in, and has been free from all infectious diseases. The health of the inmates is first-class.

The county jail is kept in good shape. The county court house is a fine stone building, well lighted, with good ventilation, and heated with steam. In point of sanitation it is first-class. Our sewer system has received much attention during the last year, and has resulted much in improvement of the same. Had they the proper outlet it would be in fine shape. The Valparaiso city water supply is from wells and the city water works. The last few years have proven that most of the cases of typhoid fever were caused from the water of certain wells, which has led to the abandonment of most of the wells and taken to the city water, which, I believe, is entirely free from germs. We have had considerable trouble in getting physicians to report their cases. Only a few cases of typhoid fever have come to my notice on this account, and those not until after death, which I have six in all, thirty-two cases diphtheria, with seven deaths, one case of malnutrition, one diabetes mellitis, seven tuberculosis, five pneumonia, six from railroad and other accidents, three peritonitis, six heart failure, four meningitis, one membranous croup, one measles, six old age, two puerperal fever, one fibroid tumor, two dysentery, one perforated stomach, two Bright's disease, one cirrhosis of the liver, one apoplexy, three cholera infantum, one spinal bifida, four cancer, three still-born, one eclampsia, four enteritis, three paralysis, one congestion of brain, one septicaemia, one scarlet fever, three rheumatism, one hydrocephalus, one spinal abscess. Making in all ninety-seven deaths.

Typhoid fever, I am pleased to say, is greatly diminishing yearly in our county, and by strict quarantining we have almost complete control of diphtheria. I think much success is due to the County Health Officer, and to be efficient should at all times be prepared to make the culture whenever a case shows the slightest suspicion.

Yours respectfully,

J. C. CARSON,
Secretary Porter County Board of Health.

POSEY COUNTY.

MOUNT VERNON, IND., November 15, 1896.

We have had no epidemics of contagious or infectious diseases during the year; of course, there have been scattering cases of typhoid fever, diphtheria, scarlet fever, measles, etc. It seems very hard to get physicians to be prompt in sending in reports, but it seems better since I have been in office, as I have tried to keep it constantly before their minds, and am continually reminding them of the penalty should they fail to stand up to the rules and regulations, and I hope to get everything in perfect running order by 1897, and I expect to see that sanitary measures are more perfect in the future than they have been in the past. But, everything considered, I am glad to report the sanitary condition of Posey County up to date as being in very good shape. Number of deaths from October 31, 1895: White, 280; black, 25. Total, 305. Very truly,

I. C. WATT, M. D.,
Posey County Health Officer.

PULASKI COUNTY.

WINAMAC, IND., November 6, 1896.

In answer to your letter to furnish a review of the sanitary condition of this county for the year ending September 30, 1896, I will say it is good. We have only had a few cases of contagious diseases, which were properly managed and kept within limits. A few cases only of typhoid and scarlet fever and diphtheria have been reported. When necessary, if the laws of health are endangered, measures governing the same are enforced. The sanitary condition of the jail, poor asylum and school buildings are all in good condition.

J. J. THOMAS, M. D.,
Secretary County Board of Health.

PUTNAM COUNTY.

GREENCASTLE, IND., December 17, 1896.

The health of Putnam County for the year, September 30, 1895, to October 1, 1896, has been remarkably good, excepting October, November and December, 1895, when typhoid fever was unusually prevalent, due, most probably, to the prolonged drouth of that year.

There was reported during the twelve months 115 cases of typhoid fever, with fifteen deaths. The death rate is, as I believe, too small, owing to the difficulty of getting all the cases reported. The blanks, some of them, read "malignant" typhoid fever, and some physicians interpret this to mean that it is only necessary to report the malignant cases.

There were seven cases of diphtheria reported, with two deaths; but two deaths were also reported as being caused from "membranous croup;" these being added would make nine cases, with four deaths.

There were nineteen deaths from phthisis pulmonalis, five from tubercular meningitis and seven from meningitis. Probably a large part of the latter were of tubercular origin.

There were nine deaths from organic heart disease and three more were reported "heart disease" only.

There were ten deaths reported from cancer, divided as follows: Cancer, 2; cancer of bladder, 1; of liver, 2; of stomach, 2; of breast, 2; of uterus, 1.

There were twenty-six cases of scarlet fever reported. No deaths from it. There were 191 deaths from all causes, and twelve still births, which included, would make 203 deaths reported, in a population of about 22,000. While not as perfect and complete as it should be, it is as near complete as is possible to get it until a burial permit is required and the law enforced. Quarantine and isolation has been enforced as thoroughly as it is possible to do it until we get the co-operation of the physicians. Their laxity and personal carelessness in treating these cases, many going in and out of the houses without any precaution being used, is the great drawback to a proper quarantine. A lady informed me that the attending physician was in the habit of laying his overcoat on the bed of her child that was sick with scarlet fever, while examining and prescribing for it. As long as the profession is thus lax the laity will be also. If the physician himself is careful, then the family will be.

Yours truly,

G. W. BENCE, M. D.,
Secretary Putnam County Board of Health.

STARKE COUNTY.

The general health of Starke County for the quarter ending September 30, 1896, has been good. The mortality from all causes has been as low and probably lower than other counties of Indiana. The general sanitary condition of the county, although not being up to the standard of perfection, is certainly good.

The people of Starke County are fast learning that it is much better to prevent the contraction and spread of diseases than it is to cure them. The sanitary condition of the school houses of the county is probably on an average of that of other counties. They are usually located upon a good site of rising ground. All, or nearly all, are new frame buildings, well painted, and heated with coal or wood, and generally ventilated from top of window. Water is supplied from wells.

The county jail is a very substantial structure, and but for the imperfection of the sewers leading to the Yellow River bottoms the building would be first-class.

A few cases of diphtheria have been reported from near the south border of our county. The physicians in attendance used all precautions by isolating the patients, and the disease soon ended. The means used to prevent the spread of diseases is mostly that of the good sense and judgment of the people, regardless of those who have authority in such matters.

Not all contagious diseases are reported to the health officer in this county by the physicians. Neither are the deaths and births reported as they should be, but a majority of the physicians in the county comply with the law.

I. M. SMITH, M. D.,
Secretary Starke County Board of Health.

STEUBEN COUNTY.

ANGOLA, IND., November 5, 1896.

In answer to your letter of the 4th instant regarding the sanitary condition of Steuben County and the health of the people, I will say the county buildings and grounds, including all public buildings and public schools, are in an excellent condition, being clean, well kept, thoroughly ventilated and drained. The county jail and infirmary are well supplied and kept with things needful for the health and comfort of the inmates, including all sanitary arrangements. The general health of the people during the year just ended has been good. But for the usual diseases incident to childhood there has been nothing of importance except a few cases of scarlet fever scattered about the country; some cases of measles in season scattered widely around, and whooping cough, with no serious results; some cases of typhoid fever, so scattered as to indicate no local source of infection. There has been but one outbreak of diphtheria, in the southwest part of the county, in one family, with two deaths. Prompt and vigorous means were instituted to limit and control the disease in this family, in which so far it has succeeded. All infectious and contagious diseases have been mild in character and where these have been reported and observe! the rules of the Board of Health have been carried out as far as it has been possible to do so.

W. H. LANE,
Secretary County Health Board.

SULLIVAN COUNTY.

SULLIVAN, IND., November 10, 1896.

The health of this county for the past year has been unusually good. The sanitary condition of the county is fairly good. We have been spared the scourge of an epidemic of any character. We have had a few cases of diphtheria, measles and membranous croup, but by strict quarantine and disinfection it was stamped out very easy. We have had very few cases of typhoid fever, but we have had more malarial fever than for ten or twelve years past. The past year has been one of improvement in our county. We have built thirteen miles of gravel road (all that is in the county), and have reclaimed a great many acres of marsh land by dredging, tiling and levies; also, our commissioners are building as commodious a structure on the poor farm, one mile east of Sullivan, as there is in the State for the money. They are to use water from the city water works, to be heated by steam, have both hot and cold water, and will cost something near \$30,000. Our jail is kept in excellent condition by our Sheriff, Mr. Wm. Mills. Our schools are not what we would like to have them, but there has been a great reformation in line of sanitation and disinfection.

Deaths reported in 1896: Cancer of stomach, 1; pernicious fever, 2; paralysis, 2; pneumonia, 4; diabetes insip., 1; measles, 2; dysentery, 1; indigestion act., 2; rheumatism, 1; diphtheria, 2; meningitis, 5; typhoid fever, 3; membranous croup, 7; tuberculosis, 6; scrofula, 2; heart failure, 4; chronic cystitis, 1; fracture of skull, 1; cholera infantum, 1; decline, 2; bronchitis capillary, 3; still birth, 2; burned to death, 1; suicide by shooting, 1; peritonitis acute, 2; catarrhal fever, 1; cancer of bladder, 1; congestive fever, 1; epileptic convulsion, 1; killed by falling in coal mine, 1. Whole number of deaths, 64. Respectfully,

C. H. EDWARDS, M. D.,
Secretary.

SWITZERLAND COUNTY.

VEVAY, IND., November 9, 1896.

Before entering into a resume of the health record will state that the people of this (Switzerland) county have been comparatively free from zymotic or contagious diseases during the year just ended. The sanitary condition of our county may be classified as good. There have been a number of deaths from tuberculosis, which may be accounted for, in part at least, by the miasmatic influences and fogs incident to our peculiar geographical situation in the Ohio valley.

The number of deaths from the various forms of heart disease is also worthy of notice, but I am unable to give any rational cause for the apparent increase of these affections.

The following is a classified list of deaths as reported to me: Apoplexy, 4; Bright's disease, 4; cancer, 4; diphtheria, 3; gastritis, 2; heart disease, 13; paralysis, 6; pneumonia, 9; senility, 3; tuberculosis, 11; all other diseases, 17. Total, 76.

Yours very truly,

J. W. SMITH, M. D.,
Secretary Switzerland County Board of Health.

TIPPECANOE COUNTY.

LAFAYETTE, IND., September 30, 1896.

The sanitary condition of this county generally speaking is very good. The amount of sickness has been greatly below the average for the year. The canal which has so long given us trouble, is being filled, and the pond between the city and West Lafayette is getting the needed drainage. Since the introduction of a system of wells our water works are giving us a supply of water that has almost stamped out typhoid fever in Lafayette and West Lafayette. In country districts the disease continues about as usual.

In the past year we have had 252 deaths reported, the country physicians being slow to report. Of these deaths consumption claimed 31 cases; heart disease, 12; typhoid fever, 11; cholera infantum, 9; meningitis, 8; paralysis, 7; diphtheria, 4; scarlet fever, 3; thus showing very conclusively our most dreaded destroyer, about 12½ per cent. having died of consumption.

Antitoxin has been used in diphtheria with remarkable success where used within a reasonable time.

Very truly yours,

G. K. THROCKMORTON, M. D.,
Secretary Tippecanoe County Board of Health.

VIGO COUNTY.

TERRE HAUTE, IND., November 27, 1896.

The health and sanitary conditions of Vigo County have been all that could be expected for the past year, with the exception of diphtheria which has been with us during the whole year, apparently resisting all efforts of extermination, 163 cases having been reported from the city of Terre Haute and the adjoining townships on the east and northeast, the west and southern part of county being almost entirely free from it. I attribute the reason to the fact that the affected rural districts are chiefly inhabited by miners, and it is very difficult to make them observe the quarantine rules. I have made personal visits among them and, almost house to house investigation, found many filthy surroundings, from which almost any form of disease may find its origin. I spared no pains in impressing upon the people the necessity of absolute isolation with proper disinfection and cleanliness, and within the last few days have been reliably informed that the disease is rapidly abating and apparently under good control. Thirty-six deaths have been reported from diphtheria during the year.

From typhoid fever 23 deaths during the year from all parts of the county, the number of deaths being far in excess of the number of cases reported. Nearly all the physicians neglect reporting typhoid fever, although repeatedly notified to do so.

Scarlet fever has made its appearance several times, but not to any alarming extent, with but four deaths.

One case of small-pox in March, but we promptly removed it to a safe distance from the city and established a rigid quarantine. No other cases developed. The man made a slow but safe recovery.

Measles have been reported during the entire year, amounting to a large number of cases, chiefly confined to the State Normal School, but it has been of a mild form and only one death resulting from it.

Phthisis as usual has not failed to get in its deadly work, 77 deaths occurring from it during the year.

The above are the deaths from communicable diseases, the balance of the 572 which occurred in the county during the year were from causes incident to the climate, accidents, suicides, and those inherited by the human race in general.

I would suggest that all undertakers in the county be compelled to obtain a burial permit from the proper health officer before making interments in any part of the county. It would assure correct death returns, and also prevent public funerals where parties have died of contagious disease; a number of such funerals have been held in the county very recently where death resulted from diphtheria, and I have traced two at least of our local epidemics to these sources. The undertakers said they did not know from what disease the children died as the doctor did not say anything particular about it. I am convinced it is time some one had something to say about such cases, and under no circumstances should a body be buried until the proper health officer has signed the burial permit.

Very respectfully yours,

J. R. WILLIS, M. D.,
Secretary Vigo County Board of Health.

WAYNE COUNTY.

Total deaths in Wayne County for the year ending September 30, 1896, was 478. This is 41 below the average for the five next preceding years. The most prolific causes of death were: Senility, 48; pneumonia, 42; consumption, 41; inanition, 27; heart disease, 24; meningitis, 22; paralysis, 20; typhoid fever, 19; tuberculosis, 18; apoplexy, 18; Bright's disease, 15; cancer, 14; uræmia, 8. Senility as here reported covers the complicated disorders of great old age, and paralysis also signifies great age, likewise apoplexy; these aggregate 86, over 18 per cent. of the deaths from old age, and both pneumonia and inanition furnish a few that properly belong to the same category. Consumption should have the 18 deaths from tuberculosis added to it, making 59 deaths, over 12.3 per cent. of the year's mortality, from tuberculosis of the lungs, with probably a slight increase from errors in some other returns. Heart disease is so indefinite that it conveys no information. Certain urinary disorders causing death are returned as Bright's disease or uræmia, according to the fancy of the returner. In this report jointly they number 23, nearly 5 per cent. of the whole list.

Typhoid fever 19 deaths only, and 11 of these in the first quarter of the year, *i. e.*, the last three months of 1895, being the close of the epidemic of the previous summer; diphtheria 7 deaths, and scarlet fever 2 deaths. These low figures of the three diseases, and there are no others, indicate almost an entire absence of the usual dangerous contagious and infectious diseases in Wayne County during the year under consideration.

Deaths of children under 5 years of age 83, equal to 17.36 per cent. of the whole; the chief causes returned, inanition and meningitis, equal 10 per cent., but no information given of the variety of meningitis.

The deaths included in this synopsis, 408, constitute 85.35 per cent. of the whole. The remaining 14.65 per cent. covers a large number of causes of death, returned under 37 different titles.

It may be counted as certain that 478 does not include all the deaths that occurred in Wayne County during the year reviewed. Both from the low death rate given—13 per 1,000 of population—and investigation in the past I am quite sure 25 per cent. should be added to the figures returned to meet the actual mortality of the year. This would give a mortality of 598, and a death rate of 16 per 1,000 of population, which is not above, if equal to, a theoretic estimate.

The sanitary condition of the county is good, evidenced by observation and by the facts that no epidemic has visited us during the year, and that over 18 per cent. of all deaths reported were due to old age. Respectfully submitted,

JAMES F. HIBBERD, M. D.,
Secretary Wayne County Board of Health.

WELLS COUNTY.

In reply to your request for a letter giving the status of health and sanitary condition of Wells County for the year, I would respectfully submit the following: The health of our people has been excellent for the year, there not having been any epidemics until within the last six weeks, when diphtheria broke out, as I informed you by letter at the time. This disease has prevailed to considerable

extent throughout the county, more particularly in the country districts and villages, where twenty or more deaths have occurred from it among children. In Bluffton, four or five weeks ago, there were a number of cases and two deaths, but the rigid quarantine, the closing of one of the ward schools for a time and vigorous efforts on the part of our physicians to enforce the quarantine measures and the use of antitoxin, with an entire willingness on the part of the public in general to co-operate, has saved us thus far from an epidemic in this city; however, at the present writing, another death from diphtheria has occurred and several new cases have appeared among the school children, and an outbreak being feared, the schools of the city were closed for one week and all children of the age of sixteen years and under were not allowed on the streets; also all public meetings, including church and Sabbath-school services, were, by proclamation of the Mayor of the city, prohibited for one week. This public quarantine has just expired, and the schools have reopened, with no new cases to report from the disease.

Typhoid fever and scarlatina have prevailed to a slight extent throughout the county during the year, but they have been mild in nature with light mortality; the former due to impure water.

Quite a number of deaths from cholera infantum have occurred, incident, as usual, to the heated season and bad hygienic surroundings.

Our county poor house is in good condition; have not had any epidemics of any kind there during the year among the sixty inmates. The management is in the hands of Mr. David Gottschalk and his estimable wife, who spare no means to keep the floors, bedding and wearing apparel in a clean and healthy condition, which is as a God-send to the poor and forsaken, who are often brought here from hovels of filth and starvation to be washed and clothed and fed.

Some improvements are needed at the poor house, viz.: New floors should be put in, as the old ones are giving way. The heating of the building, which is by stoves, is very dangerous to inmates and the building, and belongs to by-gone days. The County Commissioners should adopt and put in the most modern heating arrangements for such institutions. This done, then adequate bathtubs and flush closets could be constructed and the best hygienic conditions brought about.

The county jail, built but a few years since, is modern in all its appointments and is kept in splendid condition. No sickness has occurred of any note for the year.

The city of Bluffton, with its population of 5,000, has had excellent health for the year; a few cases of typhoid fever and scarlet fever are about the only contagious diseases we have had until the outbreak of diphtheria, which, as I have already stated, was kept under control by strict adherence to quarantine regulations. The city has a splendid system of public water-works, with mains coursing to nearly every part of the city. It was constructed at the city's expense at a cost of \$30,000. The water is supplied by a number of wells drilled down into the rock, and is pure and of most excellent quality; the number or proportion of the population, including the public schools, using this water is about 2,000, and the number of gallons pumped daily for all purposes, according to the statement of the engineer, are 500,000.

Next to mention is our sewer system just now being built at the city's expense at a probable cost of seventy-five thousand dollars. It embraces two separate systems, the storm sewer for carrying off the surface water and the sanitary for disposing of the sewage of the city, the terminal of each being the Wabash River which flows by and forms the northern boundary of the city.

The disposal of the accumulation of garbage is a question that ought to occupy the minds of our city counsel at an early date, as such accumulations act as the hot-beds of disease. The county court house needs but a passing notice, being new and modern in every particular, it is kept in the best of sanitary condition.

Our County Commissioners recently purchased a farm, cornering with the poor farm, and the good and charitable ladies of the W. C. T. U. organization are endeavoring to have the farm house on this new purchase remodeled and equipped as an "*orphans' home*" intended to take the little children out of the poor farm and from among the hardened and wretched and have them cared for and taught here among pleasant and happy surroundings. Aid is being asked from the public by these ladies to assist in carrying out the plan as indicated.

The total number of deaths in the county for the year was one hundred and sixty-six, and the probable causes have already been indicated in the letter. This is as near correct as could be expected under the means at hand by the State Board for collecting such statistics.

I have received from you, from time to time, a number of health rules and circulars to be promulgated by publication and enforcement, which has been done in accordance with the requirements of the State Board.

Very respectfully,

G. E. FULTON,
Secretary Wells County Board of Health.

Reports were not made from the following counties:

Bartholomew	S. M. Voris	Secretary.
Benton	Clark Cook	Secretary.
Blackford	L. C. Bell.	Secretary.
Brown	J. C. Ross	Secretary.
Carroll ..	W. L. Sharrer.....	Secretary.
Cass	F. A. Bushjahn.....	Secretary.
Clark.....	I. N. Ruddell.....	Secretary.
Clay.....	Robt. W. Hawkins	Secretary.
Clinton	G. W. Brown	Secretary.
Daviess.....	G. W. Willeford	Secretary.
Dearborn	S. B. Chamberlin	Secretary.
Decatur.....	J. H. Alexander	Secretary.
Dekalb	F. M. Haines	Secretary.
Elkhart.....	J. H. Heatwole.....	Secretary.
Gibson.....	A. R. Burton.....	Secretary.
Grant.....	W. R. Francis.....	Secretary.
Greene.....	W. R. Selfridge	Secretary.
Hendricks.....	Wm. J. Hoadley	Secretary.
Henry	O. J. Gronendyke	Secretary.
Howard.....	R. H. Smith	Secretary.
Jasper	Moses B. Alter	Secretary.
Jefferson	Mollie Lewis	Secretary.
Knox.....	J. A. Swartzel.....	Secretary.
Lake	W. P. Blackstone	Secretary.
Laporte.....	F. T. Wilcox.....	Secretary.
Marshall.....	G. C. Knott.....	Secretary.

Martin	H. W. Shirley.....	Secretary.
Miami	J. O. Ward	Secretary.
Morgan	Theo. Henson	Secretary.
Newton	R. C. McLain	Secretary.
Orange	S. L. Lingle.....	Secretary.
Parke.....	Marion Goss	Secretary.
Perry.....	C. M. Brucker.....	Secretary.
Pike.....	S. R. Clark.....	Secretary.
Randolph.....	H. F. Chenoweth	Secretary.
Ripley	R. T. Olmsted.....	Secretary.
Rush ..	Lot Green	Secretary.
Scott	S. M. Rogers	Secretary.
Shelby	T. S. Jones	Secretary.
Spencer.....	J. T. Wheeler.....	Secretary.
St. Joseph.....	T. B. Lyon.....	Secretary.
Tipton.....	A. S. Dickey	Secretary.
Union	C. C. Fosdick	Secretary.
Vanderburgh	J. C. McClurkin.....	Secretary.
Vermillion.....	T. E. Saunders	Secretary.
Wabash.....	J. H. Ford.....	Secretary.
Warren.....	J. R. Watson.....	Secretary.
Warriek	D. DeForrest.....	Secretary.
Washington.....	W. J. Purkhiser.....	Secretary.
White.....	J. J. Hanmore	Secretary.
Whitley	J. F. Crisswell.....	Secretary.

TERRE HAUTE CREMATORY.

FROM THE ANNUAL REPORT OF THE TERRE HAUTE BOARD OF HEALTH.

The device adopted and used in this city for the disposal of miscellaneous garbage, including night soil and dead animals, is known as "The Brownlee Garbage Furnace." It was erected at a cost of \$10,000 in the summer of 1893, and was put into service the following September. With a brief interruption, consequent upon the destruction by fire of the frame portion, in July, 1894, it has been in constant use since its completion, in September, 1893, and has consumed by incineration the entire production of the city, containing a population of about 40,000 inhabitants, from the beginning to the present.

The furnace is rated at seventy tons, and is guaranteed to consume this amount in twenty-four hours.

The foregoing statement is fully warranted by reports herein contained and to which attention is called.

The following is the monthly statement of garbage consumed:

1995.	Barrels.
January	1,858
February	1,859
March	1,900
April	2,524
May	3,149
June	2,808
July	2,824
August	5,746
September	6,015
October	2,737
November	2,285
December	3,002
Total	36,707
Night soil consumed during the year	492
Grand total	37,199

DEAR SIR—In reply to your letter of inquiry of 22d inst., as to the amount of garbage consumed, the amount of coal used and the cost of repairs for the month of September, by and for the Brownlee garbage furnace owned and operated by the city of Terre Haute, I take great pleasure in forwarding to you the following report for twenty-eight days of September (four weeks), as compiled from my daily record, to wit:

Amount of garbage, consisting of kitchen refuse, night soil, refuse from large poultry houses and commission and retail groceries, for the week ending September 6, received and consumed	1,319 barrels.
Amount of same for week ending September 13	1,547 barrels.
Amount of same for week ending September 21	1,606 barrels.
Amount of same for week ending September 28	1,177 barrels.
Making a total for twenty-eight days of	5,649 barrels.

Allowing 400 pounds to the barrel, the total number of pounds would be 2,259,600, equal to over forty tons per day.

We used 48,500 pounds or $24\frac{1}{2}$ tons of bituminous coal, for which we paid \$1.50 per ton, equal to.....	\$36 37
And 48,660 pounds, equal to $24\frac{1}{2}$ tons, of Brazil block coal, for which we paid \$1.65 per ton.....	40 15
Wages of two men (one day and one night man) for 28 days, at \$45 per month each.....	84 50
Repairs for grate bars, average per day, 8c.....	\$2 24
Cost of oil, average per day, 3c.....	84
Repairs of tools, pokers, stoking rods, etc.....	1 40
Total cost for repairs for September	4 48
Total amount of operating expenses for 28 days	\$165 50

Which amount equals, as will readily be seen, the very low cost of $14\frac{3}{4}$ cents per ton. I desire to state that the furnace is doing splendid work; although our plant is outside the city limits, the almost total absence of offensive odor, either in receiving or burning the garbage, would remove all objection to its location within the borders of any city. I am,

Very respectfully,

I. W. MITCHELL,
Superintendent of Crematory.

REPORT ON RICHMOND CREMATORY.

RICHMOND, IND., November 19, 1896.

During the fall of 1895 the Health Officer of Richmond, Indiana, set forth in a communication to the Common Council the necessity of a sanitary disposal of garbage and city waste. The matter was referred to a special committee, who in connection with the Health Officer, proceeded to investigate the demand and to systematically inquire into the best method. Cremation was decided upon and the Engle furnace selected as the best adapted to the wants of Richmond, a city of 20,000 inhabitants. Upon order of the Common Council a contract was entered into with the Engle Sanitary and Cremation Company of Des Moines, Iowa, and the result was the construction of a furnace, completed May, 1896. The cost of the plant was \$7,000, and from the day of the test until the present it has given entire satisfaction, consuming as it does all the garbage and the entire combustible waste of the city.

CONSTRUCTION.

The cremator is 23 feet long between walls; 9 feet high, 4 feet six inches wide outside walls of brick, inside walls of fire clay brick with six inch air space between walls. There are 4 feeding holes; one large enough to receive the carcass of a horse. The garbage falls upon transverse grate bars in the upper or main combustion chamber. The bars are made of interlocked fire clay moulded blocks keyed together with spaces through which ashes fall into the pit below. There are

3 fires, one at the stack end of furnace—the fire passing over the garbage; one at the center passing both under and over; and a third at the opposite end completing the process of combustion, which is perfect. The stack is 60 feet high, and an average of 30 inches in diameter. The covering house is commodious and light, with doors at each end permitting the passage of wagons over the furnace. No collection is permitted and the premises are kept in a sanitary condition.

OPERATION OF FURNACE.

The combustion is so perfect that nothing appears to escape from the stack. The gases are invisible, and are discharged at a temperature of 1,000 degrees at top of stack. The ashes, rich in phosphates, have a varying commercial value. The distinguishing feature of the "Engle" is the third fire, where the original products of combustion are destroyed or transformed, and the heat utilized in furnishing a hot-air blast to supply oxygen.

During the month of August, as will be observed by the table, 915 cubic yards were consumed, which, including cost of superintendent, gathering of garbage, repairs, fuel, interest on cost of plant (\$7,000), to which is added 5 per cent. for natural deterioration, cost 49 cents per cubic yard for consuming. The simple cost of burning was 10 cents per cubic yard. Night soil is consumed at the rate of 3,000 barrels per year. Originally crude oil was used as a fuel, but it was found to be too expensive, and natural gas is now used at a cost during the hot months of \$3.04 per day. My observation is that where natural gas can not be obtained, coal is the proper fuel for a cremator.

LOCATION.

The plant is located within two blocks of the court house, near the center of the city, making short hauls.

Formerly, as is done in most cities, the garbage was hauled to the country to be fed to swine, which, when fed upon city slop are prone to many diseases which might be avoided. Trash from streets and alleys was deposited upon dumps where it was left to decompose, filling the air with offensive and noxious odors—a fruitful source of discomfort and disease. No estimate can be made of the germs of disease destroyed by the operation of the furnace in the 4,794 cubic yards of the city waste consumed since May of the present year. From a strictly sanitary point of view in cremation lies the only real safety.

T. HENRY DAVIS, M. D.,
Health Officer.

WATER WORKS STATISTICS.

COUNTIES.	CITIES AND TOWNS.	Built.	Cost.	Ownership.	Gals. of Water Pumped Daily.	No. of Deaths from Typhoid Fever, Year Ending October 31, '96.
Adams	Decatur	1885	\$38,000	City . . .	60,000	2
Allen	Ft. Wayne	1878	395,643	City . . .	13,000,000	2
Bartholomew	New Haven	1895	6,000	Town . . .	10,000	7
Benton	Columbus	1874	40,000	City . . .	1,500,000	5
	Fowler	1895	36,000	City . . .	250,000	
Blackford	Hartford City	1894		City . . .		10
	Montpelier	1895		City . . .		
Boone	Lebanon	1894	60,000	City . . .	260,000	4
Brown				City . . .		
Carroll	Delphi	1892	40,000	City . . .	400,000	18
Cass	Logansport	1876	175,000	City . . .	2,500,000	24
Clark	Jeffersonville	1888	125,000	Private . .	500,000	15
Clay	Brazil	1875	125,000	City . . .	400,000	3
Clinton	Frankfort	1885	100,000	Private . .	300,000	
Crawford	Leavenworth	1896	5,000	Private . .	1,000	
	English	1896	5,000	Private . .	4,000	4
Daviess	Washington	1888	65,000	Private . .	750,000	14
Dearborn				Private . .	300,000	
Decatur	Greensburg	1890	90,000	Private . .	10,000	1
Dekalb	Butler	1892	25,000	City . . .		
	Garrett	1896	45,000	City . . .	8,000	
Delaware	Muncie	1886	200,000	Private . .	10,000	
Dubois				Private . .	5,000,000	
Elkhart	Goshen	1875	175,000	Private . .	1,000,000	4
Fayette	Connersville	1870	30,000	City . . .		4
Floyd	New Albany	1875	400,000	Private . .	1,000,000	
Fountain	Covington	1892	30,000	City . . .		
	Attica	1870	20,000	City . . .		2
Franklin	Brookville	1892	22,500	City . . .	30,000	
Fulton	Rochester	1894	32,000	City . . .	50,000	
Gibson				City . . .	4,000,000	14
Grant	Marion	1877	100,000	City . . .		
	Fairmount	1894	280,000	City . . .		
Greene				Private . .	500,000	
Hamilton	Noblesville	1891	65,000	Private . .		
Hancock	Greenfield	1894	35,000	City . . .	150,000	
Harrison	Corydon	1894	50,000	Private . .		1
Hendricks	Danville	1892	22,000	City . . .	86,000	
Henry	New Castle	1889	23,000	City . . .	300,000	
	Middletown	1896	15,000	City . . .		
	Knightstown	1894	25,000	City . . .	40,000	
Howard	Kokomo	1887		Private . .	700,000	14
Huntington	Huntington	1890	150,000	City . . .	800,000	
Jackson	Seymour	1889	82,000	Private . .	500,000	
Jasper						
Jay	Portland	1895	48,000	City . . .	159,000	1
	Dunkirk	1894	18,000	City . . .	25,000	
Jefferson	Madison	1895	125,000	City . . .	100,000	3
Jennings	North Vernon	1892	20,000	City . . .		
	Vernon	1896	5,000	City . . .	20,000	
Johnson	Franklin	1891	55,000	Private . .	220,000	
	Edinburg	1894	22,000	City . . .	140,000	
Knox	Vincennes	1886	175,000	Private . .	600,000	
Kosciusko	Warsaw	1887	40,000	Private . .	400,000	
Lagrange	Lagrange	1893	24,000	City . . .	300,000	

WATER WORKS STATISTICS.—Continued.

COUNTIES.	CITIES AND TOWNS.	Built.	Cost.	Ownership.	Gals. of Water Pumped Daily.	No. of Deaths from Typhoid Fever, Year Ending October 31, '96.
Lake						
Laporte	Laporte	1870	.	.	2,500,000	.
	Michigan City	1886	.	City	4,000,000	.
Lawrence	Bedford	1893	\$65,000	City	500,000	.
Madison	Anderson	1886	150,000	City	8,000,000	5
Marion	Indianapolis	1870	2,500,000	Private	9,000,000	43
	Brightwood	1894	22,000	City	250,000	.
Marshall	Plymouth	1888	17,000	City	150,000	.
	Bremen	1892	10,000	City	200,000	.
Martin . . . . .						.
Miami	Peru	1879	110,000	City	850,000	.
Monroe	Bloomington . . . . .					.
Montgomery . . . . .						.
Morgan	Martinsville	1894	23,500	City		3
Newton	Kentland	1895	6,500	City	10,000	.
Noble	Kendallville	1887	65,000	City	350,000	.
	Ligonier	1888	14,500	City	150,000	.
	Albion	1896	30,000	City		1
	Avilla	1896	4,000	Town	6,300	.
Ohio . . . . .						.
Orange	Paoli	1894	15,000	City	25,500	.
Owen . . . . .						.
Parke . . . . .						.
Perry	Cannelton	1893	25,000	Private	300,000	.
Pike . . . . .						.
Porter	Valparaiso	1885		Private	1,000,000	1
Posey	Mt. Vernon	1886	60,000	Private	250,000	12
Pulaski						5
Putnam	Greencastle	1887	150,000	Private	700,000	2
Randolph	Union City	1873	38,000	City	20,540	.
Ripley . . . . .						.
Rush	Rushville	1895	75,000	City	40,000	6
Scott . . . . .						.
Shelby . . . . .						.
Spencer	Rockport	1886	8,000	Private	120,000	1
Starke . . . . .						.
Steuben	Angola	1895	25,000	City	100,000	.
St. Joseph	South Bend	1873	279,000	City	300,000	9
	New Carlisle	1876	7,500	City	10,000	.
Sullivan	Sullivan	1896	40,000	City	750,000	3
Switzerland	Vevay	1895	17,500	City	25,000	.
Tippecanoe	Lafayette	1875	300,000	City	1,726,000	.
	West Lafayette	1894	60,000	Private	250,000	.
Tipton	Tipton	1894	35,000	City	28,800	1
Union	Liberty	1895	15,000	City	100,000	.
Vanderburgh	Evansville	1872	350,000	City	7,000,000	39
Vermillion . . . . .						.
Vigo	Terre Haute	1893		Private	3,500,000	13
Wabash . . . . .						.
Warren . . . . .						.
Warrick	Boonville	1896	34,000	City	2,000	5
Washington . . . . .						.
Wayne	Richmond	1884	450,000	Private	2,500,000	4
Wells	Bluffton	1886	30,000	City	500,000	3
White	Monticello	1895	36,000	Town	50,000	2
Whitley	Columbia City	1894	35,000	City	100,000	5
	South Whitley	1895	15,000	Town . . . . .		.

TABLE A.

*Return by Counties of Contagious and Infectious Diseases for the
Year Ending September 30, 1896.*

COUNTIES.	Diphtheria.	Scarlet Fever.	Measles.	Small-pox.	Erysipelas.	Whooping- cough.	Cholera.	Cerebro Spi- nal Fever.	Typhoid Fever.
Adams . . . . .	.	.	.	.	.	.	.	.	57
Allen . . . . .	.	.	.	.	.	.	.	.	.
Bartholomew	174	8	8	.	.	.	.	.	74
Benton	2	3	.	.	.	.	.	.	.
Blackford	26	.	.	.	.	.	.	.	2
Boone	2	33	22	.	.	.	.	.	12
Brown	75	.	.	.	.	.	.	.	9
Carroll	7	7	.	.	.	.	.	.	10
Cass . . . . .	.	.	.	.	.	.	.	.	.
Clark . . . . .	.	.	.	.	.	.	.	.	.
Clay	18	11	.	.	.	.	.	2	23
Clinton	2	9	23	.	.	.	.	.	.
Crawford	2	.	.	.	.	.	.	.	5
Daviess	97	2	1	.	.	.	.	1	1
Dearborn	11	15	136	.	.	.	.	.	32
Decatur	37	6	5	.	1	.	.	4	49
Dekalb	20	6	3	.	2	16	.	.	8
Delaware	140	104	13	.	.	.	.	.	34
Dubois	89	34	.	.	.	.	.	.	22
Elkhart	81	8	2	.	.	.	.	.	21
Fayette	4	68	75	.	.	.	.	1	30
Floyd	1	17	28	.	3	8	.	.	3
Fountain	11	7	1	.	.	.	.	1	9
Franklin	15	8	112	.	.	.	.	.	9
Fulton	43	84	.	.	.	.	.	.	11
Gibson	11	9	4	.	.	.	.	.	37
Grant	22	26	.	.	.	.	.	.	3
Greene	46	8	3	.	.	.	.	.	4
Hamilton	11	16	18	.	.	.	.	.	50
Hancock	55	59	9	.	.	.	.	.	14
Harrison	9	4	.	.	.	.	.	.	4
Hendricks	6	13	6	.	.	.	.	.	16
Henry	20	87	17	.	.	.	.	.	19
Howard	150	20	.	.	.	.	.	.	.
Huntington . . . . .	.	.	.	.	.	.	.	.	.
Jackson	4	1	27	2	.	.	.	.	1
Jasper	4	.	.	.	.	.	.	.	.
Jay	52	38	1	.	.	.	.	1	4
Jefferson	2	.	.	.	.	.	.	.	.
Jennings	9	1	5	.	.	.	.	.	15
Johnson	23	22	10	.	.	.	.	.	60
Knox	30	1	.	.	.	.	.	.	3
Kosciusko	61	36	21	.	.	.	.	.	25
Lagrange	1	16	77	.	.	.	.	1	4
Lake	23	32	7	.	2	.	.	.	23
Laporte	19	60	16	.	.	.	.	2	4
Lawrence	55	5	.	.	.	.	.	.	.
Madison	273	31	96	.	.	.	.	.	13
Marion . . . . .	.	.	.	.	.	.	.	.	.
Marshall	13	10	2	.	.	.	.	.	5

TABLE A—Continued.

COUNTIES.	Diphtheria.	Scarlet Fever.	Measles.	Small-pox.	Erysipelas.	Whooping- cough.	Cholera.	Cerebro Spi- nal Fever.	Typhoid Fever.
Martin . . . . .	.	.	.	.	.	.	.	.	.
Miami . . . . .	.	.	.	.	.	.	.	.	15
Monroe	17	3	.	.	.	.	.	.	57
Montgomery	9	21	130	.	.	.	.	.	.
Morgan	9	3	.	.	.	.	.	.	.
Newton . . . . .	.	1	.	.	.	.	.	.	1
Noble . . . . .	.	31	.	.	1	.	.	.	27
Ohio	31	.	73	.	2	.	.	.	4
Orange	109	.	.	.	.	.	.	.	.
Owen	1	4	.	.	.	.	.	.	.
Parke	12	1	20	.	.	.	.	.	.
Perry . . . . .	.	.	.	.	.	.	.	.	.
Pike	4	3	.	.	.	7	.	.	2
Porter	49	6	.	.	.	.	.	.	4
Posey	86	18	4	.	.	.	.	.	33
Pulaski	22	3	.	.	.	.	.	.	.
Putnam	7	26	.	.	.	.	.	.	115
Randolph	38	81	2	.	.	3	.	.	24
Ripley	7	22	17	.	.	.	.	1	12
Rush	10	55	5	.	.	.	.	.	47
Scott . . . . .	.	.	.	.	.	.	.	.	.
Shelby	20	8	.	.	.	.	.	.	16
Spencer . . . . .	.	.	.	.	.	.	.	.	.
Starke	26	1	.	.	.	.	.	.	.
Steuben	1	9	20	.	.	.	.	.	3
St. Joseph	128	112	1	.	.	.	.	.	4
Sullivan	2	.	1	.	.	.	.	.	.
Switzerland	30	12	58	.	.	.	.	.	.
Tippecanoe	5	10	6	.	.	.	.	.	.
Tipton	4	3	.	.	.	.	.	.	3
Union . . . . .	.	24	3	.	.	.	.	.	2
Vanderburgh	176	276	41	.	1	4	.	4	161
Vermillion	2	2	1	.	.	.	.	.	.
Vigo	181	44	18	1	.	.	.	.	9
Wabash . . . . .	.	.	.	.	.	.	.	.	.
Warren	1	.	.	.	.	.	.	.	.
Warrick	7	6	.	.	.	.	.	1	3
Washington . . . . .	.	.	.	.	.	.	.	.	.
Wayne	80	76	.	.	.	.	.	.	116
Wells	25	13	5	.	1	.	.	.	21
White	6	6	.	.	.	.	.	.	4
Whitley . . . . .	.	.	.	.	.	.	.	.	.
Total	2,861	1,719	1,153	3	13	38	.	18	1,418

TABLE B.

Return by Months of Contagious and Infectious Diseases for the Year Ending September 30, 1896.

MONTHS.	Diphtheria.	Scarlet Fever.	Measels.	Small-pox.	Erysipelas.	Whooping-cough.	Cholera.	Cerebro Spinal Fever.	Typhoid Fever.
January	182	262	137	2	1	.	.	1	43
February	138	181	115	.	.	.	.	1	28
March	99	172	181	1	1	3	.	1	16
April	43	96	214	.	3	6	.	1	14
May	67	98	175	.	.	3	.	3	18
June	43	49	103	.	3	1	.	1	29
July	110	83	76	.	.	3	.	4	99
August	268	53	14	.	2	2	.	2	177
September	739	116	20	.	.	.	.	1	305
October	561	217	7	.	.	1	.	1	393
November	579	240	28	.	.	1	.	1	194
December	232	152	83	.	3	6	.	1	102
Total	2,831	1,719	1,153	3	13	38	.	18	1,418

TABLE A.

Marriages by Months, Color and Nationality for the Year Ending September 30, 1896.

COUNTIES.	1895.			1896.									Color.		NATIONALITY.						Total.		
	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	White.	Black.	AMERICAN.		FOREIGN.		NOT REPORTED.				
															Groom.	Bride.	Groom.	Bride.	Groom.	Bride.		Groom.	Bride.
Adams	15	17	17	27	36	24	12	16	12	8	11	18	193	9	184	189	9	189	6	4	6	193	
Allen	91	65	38	72	38	27	46	66	60	45	38	28	603	3	516	545	90	545	61	6	6	612	
Bartholomew . .	24	14	20	23	18	10	31	19	11	22	14	15	218	3	218	217	3	217	4	4	4	221	
Benton	25	7	14	7	9	5	5	1	6	6	1	10	100	..	98	96	5	96	4	..	..	100
Blackford	7	10	15	7	9	14	10	10	7	13	9	10	131	..	111	104	6	104	13	14	14	131	
Boone	29	30	29	16	17	14	12	22	10	22	17	19	237	..	237	237	..	237	..	..	..	237
Brown	4	6	5	22	10	1	3	6	6	2	8	4	77	..	30	30	..	30	..	..	..	77
Carroll	29	9	17	19	26	10	13	6	3	15	8	4	159	..	159	159	..	159	..	..	..	159
Cass	33	20	34	..	..	..	..	..	..	14	23	29	153	..	148	150	3	150	1	2	2	153
Clark	52	80	27	3	91	20	144	83	101	91	85	126	903	..	149	149	3	149	3	3	751	903	
Clay	34	28	31	29	21	28	28	20	17	25	18	28	303	4	275	281	31	281	25	1	1	307	
Crawford	13	8	15	14	22	12	18	9	10	11	23	17	135	1	135	136	1	135	..	..	..	136
Davies	10	11	10	15	19	19	11	3	13	6	8	10	94	..	91	91	..	91	..	3	8	94	
Dearborn	26	20	17	12	28	20	15	21	18	..	17	15	173	2	175	177	5	177	1	2	2	180	
Decatur	17	26	25	7	12	19	19	7	13	11	15	14	185	..	169	113	8	113	4	58	58	175	
Dekalb	23	17	31	20	21	12	33	23	17	13	15	24	329	..	183	185	2	185	..	..	..	185
Delaware	40	38	15	38	23	29	32	35	31	24	19	14	329	9	327	249	1	327	1	9	2	249	
Dubois	27	21	12	6	4	9	21	20	15	10	13	12	169	1	161	167	9	167	3	8	2	170	
Elkhart	42	18	56	58	42	38	22	21	39	27	30	30	420	3	397	407	19	407	10	7	6	423	
Fayette	20	13	15	4	4	5	10	4	13	10	8	11	111	6	114	117	3	114	..	..	..	117
Floyd	21	36	46	26	27	23	24	26	16	28	12	12	281	13	179	190	9	190	2	106	102	294	
Fountain	17	15	13	25	19	24	13	7	22	9	18	26	214	..	127	132	10	132	5	77	77	214	
Franklin	18	14	15	12	10	1	13	9	7	10	5	14	120	..	115	114	3	115	4	2	2	120	
Fulton	20	14	17	13	8	13	10	13	5	10	5	15	143	..	138	143	4	143	..	1	1	143	

TABLE A—Continued.

COUNTIES.	1895.			1896.									Color.		NATIONALITY.						Total.		
	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	White.	Black.	AMERICAN.		FOREIGN.		NOT REPORTED.				
															Groom.	Bride.	Groom.	Bride.	Groom.	Bride.		Groom.	Bride.
Gibson	56	28	27	23	14	18	21	12	14	25	36	25	288	31	277	283	6	1	16	15			
Grant	45	53	53	42	50	38	38	26	50	30	25	30	466	1	440	452	23	12	4	8			
Greene	5	15	16	36	36	36	36	36	36	36	36	36	36	5	36	32	6	3	3	4			
Hamilton	62	26	26	52	41	64	27	11	15	25	17	28	386	5	385	388	3	3	3	2			
Hancock	20	17	14	8	7	15	7	9	15	14	14	11	152	..	146	147	3	3	3	..			
Harrison	..	..	..	22	11	11	33	6	..	19	25	11	135	3	138	138	2	..	..	..
Hendricks	28	12	12	16	14	8	17	5	13	11	13	16	150	5	153	155	3	..	..	..
Henry	21	23	24	30	24	19	15	11	22	14	16	16	231	4	230	231	2	1	2	8			
Howard	35	23	14	17	23	15	22	18	26	14	24	15	240	6	229	230	4	3	13	13			
Huntington	22	28	10	15	24	12	22	12	9	19	23	20	216	..	209	214	7	2	..	..	
Jackson	22	19	16	16	18	15	34	13	16	13	18	15	213	2	184	183	31	31	23	1			
Jasper	7	20	15	18	12	19	11	15	1	8	9	10	145	..	98	100	24	21	2	24			
Jay	12	28	26	38	15	16	19	20	21	13	14	23	243	2	239	243	6	1	76	1			
Jefferson	24	10	27	26	22	24	22	19	29	13	14	22	255	..	179	179	3	..	..	..
Jennings	18	6	8	11	3	13	13	2	15	7	12	11	113	6	115	119	..	..	1	..	
Johnson	27	13	13	10	8	17	14	14	13	9	11	14	163	..	135	134	1	1	27	28			
Knox	60	26	25	50	22	27	39	19	16	23	24	19	349	7	349	284	..	..	72	72	
Kosciusko	56	17	29	18	28	22	25	19	22	35	18	13	301	1	300	301	..	..	2	1	
Lagrange	19	10	15	9	10	9	12	4	7	7	13	10	125	..	101	72	..	..	24	53	
Lake	32	28	42	29	19	16	..	..	..	30	40	37	272	1	174	179	99	93	..	1
Laporte	35	27	23	14	22	17	25	19	24	14	22	22	262	2	200	230	64	34	..	..	
Lawrence	7	21	16	16	9	17	13	13	11	16	22	22	181	2	180	182	3	1	..	..	
Madison	44	40	71	38	48	38	8	22	39	74	62	40	520	4	345	355	28	18	151	150			
Marion	183	139	147	110	99	109	157	103	136	108	75	39	1,286	110	1,254	1,286	140	104	12	16			
Marshall	20	28	28	23	17	31	21	13	16	..	..	..	189	..	98	103	9	4	82	82
Martin	8	6	10	11	4	3	9	3	7	9	7	6	83	..	77	79	6	4	..	..	
Miami	11	15	16	9	13	14	17	18	17	15	23	23	191	..	183	188	8	3	..	..	
Monroe	17	14	27	14	13	9	17	17	13	15	15	12	177	5	182	182	..	..	..	..
Montgomery	31	23	18	24	18	21	29	13	14	25	18	26	259	1	260	260	..	..	..	..
Morgan	23	19	28	13	16	19	16	5	11	17	20	23	210	..	200	199	1	2	9	9			

Newton	8	4	12	9	12	6	11	7	3	12	8	12	104	79	76	2	2	23	26	104
Noble	31	13	18	14	14	14	6	2	3	14	10	14	142	138	138	4	2	..	2	142
Ohio	6	23	10	15	5	20	15	11	6	9	8	5	41	37	37	7	7	..	..	44
Orange	12	13	12	32	46	16	24	23	16	22	20	32	147	45	157	1	..	102	102	147
Owen	..	..	..	..	..	..	..	..	..	..	..	..	275	156	..	..	..	118	275	
Parke	..	..	..	14	10	13	27	11	8	12	14	5	112	111	112	3	2	..	..	114
Perry	17	22	11	16	13	4	20	17	5	22	15	16	165	166	170	4	..	..	..	170
Pike	24	12	12	17	17	16	20	11	16	11	27	16	193	190	193	3	..	..	..	198
Porter	18	11	12	10	17	2	11	8	11	25	6	14	141	121	137	23	7	1	1	145
Posey	39	38	22	14	21	25	38	8	20	20	20	15	261	276	278	3	1	1	1	280
Putlaski	6	4	5	12	13	6	10	6	3	4	4	8	81	69	75	7	1	5	5	81
Putnam	36	10	17	30	15	17	21	9	17	10	16	22	224	220	220	2	1	2	3	224
Randolph	41	32	27	25	25	20	17	29	14	13	25	32	300	300	301	..	..	131	131	301
Ripley	29	24	16	22	11	15	19	17	14	9	12	12	200	69	69	..	..	..	..	200
Rush	13	16	10	13	7	15	9	6	8	25	14	8	142	144	144	..	..	..	..	144
Scott	10	7	7	..	..	15	2	2	6	..	11	10	70	70	70	7	6	..	..	70
Shelby	30	14	20	21	16	6	4	12	3	20	23	7	169	158	159	..	..	11	11	176
Spencer	28	21	33	30	32	27	24	21	17	12	12	12	253	263	268	5	8	1	1	269
Starke	..	..	..	5	4	1	8	..	6	6	6	11	33	24	23	7	8	2	2	32
Stauben	15	13	11	24	13	8	18	9	8	25	10	13	167	166	167	1	..	..	..	167
St. Joseph	55	35	17	30	29	16	40	31	27	52	25	26	377	291	306	78	62	14	15	383
Sullivan	12	28	19	17	18	14	16	16	13	20	16	15	201	201	202	3	2	..	..	204
Switzerland	17	11	10	15	15	8	14	12	11	6	22	7	133	134	135	1	..	3	3	138
Tippecanoe	43	27	59	28	36	22	25	32	36	23	19	28	380	346	358	37	25	..	..	383
Tipton	17	21	10	14	8	20	18	19	13	10	12	19	181	176	174	..	2	5	5	181
Union	8	6	12	4	2	4	4	4	4	5	5	3	61	61	61	..	..	..	..	61
Vanderburgh	93	70	53	56	49	38	76	61	41	63	52	73	621	665	686	60	37	..	2	725
Vermillion	10	12	6	10	6	6	10	3	4	4	10	10	88	85	87	3	1	..	..	88
Vigo	84	46	31	80	39	39	38	65	60	64	36	33	579	575	587	33	25	2	3	615
Wabash	37	17	18	25	23	22	19	10	21	14	26	20	252	249	249	3	3	..	..	252
Warren	16	13	12	11	9	7	10	3	5	10	9	11	95	92	94	3	2	2	1	97
Warwick	..	..	..	..	..	16	13	4	5	8	11	..	92	99	100	1	..	..	..	100
Washington	..	..	..	19	21	20	15	5	..	..	..	..	85	85	85	..	..	..	..	85
Wayne	46	25	37	31	22	30	33	24	18	21	29	40	346	346	343	10	13	16	16	356
Wells	27	20	14	28	11	21	22	22	6	17	11	21	236	184	182	36	38	..	..	236
White	18	15	6	..	..	..	18	9	10	10	10	7	59	94	96	5	3	..	..	99
Whitley	25	25	14	..	..	..	15	6	1	1	13	..	100	100	100	..	..	..	..	100
Total	2,481	1,930	1,893	1,905	1,713	1,566	1,917	1,460	1,520	1,680	1,619	1,624	20,851	18,235	18,518	1,069	741	2,031	2,079	21,338

TABLE B.
Marriages, Grouped Ages, for the Year Ending September 30, 1896.

COUNTIES.	GROUPED AGES.																Total.		
	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		Over 80.			Not Reported.	
	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.		Groom.	Bride.
Adams	9	46	138	121	33	19	5	2	4	2	3	1	1	3	5	2	193	2	
Allen	2	122	417	349	132	58	38	19	13	8	2	2	1	3	1	11	612	11	
Bartholomew	3	62	148	131	42	18	15	3	5	5	4	1	1	1	2	2	221	2	
Benton		31	77	62	16	4	5	1	1	1	1	1	1	1	1	1	100	1	
Blackford	6	33	76	67	23	17	14	5	8	2	1	3	3	3	1	4	131	4	
Boone	4	62	161	133	37	25	19	9	6	4	5	3	5	1	64	63	237	63	
Brown		2	7	4	8	12	2	7	3	1	1	2	1	1	1	1	159	77	
Carroll	7	40	111	97	29	12	8	3	12	3	1	1	1	1	1	1	153	1	
Cass	3	42	107	92	22	12	8	3	12	3	1	1	1	1	789	794	903	794	
Clark	2	25	75	63	32	20	3	1	2	1	1	1	1	1	3	2	307	3	
Clay	12	110	214	159	54	22	17	12	3	2	3	1	1	1	1	1	136	14	
Clinton	3	36	99	32	22	9	4	4	5	3	2	1	1	1	14	14	180	14	
Crawford	4	33	58	41	12	3	2	6	3	2	2	1	1	1	2	3	175	3	
Daviss	6	39	126	116	32	13	8	4	9	1	3	1	1	1	58	59	185	58	
Dearborn	2	21	73	72	26	14	4	8	9	1	2	1	1	1	2	2	249	2	
Decatur	5	63	125	88	24	10	14	11	7	3	3	1	2	1	5	9	338	9	
Dekalb	6	64	183	152	36	19	7	7	11	3	3	1	2	1	1	1	249	1	
Delaware	2	93	245	194	48	37	28	11	10	3	4	1	1	1	1	1	338	1	
Dubois	3	34	119	109	32	17	7	4	4	2	2	1	2	1	4	4	170	4	
Elkhart	7	80	281	260	69	45	27	16	20	5	6	3	1	1	12	14	423	12	
Fayette		37	85	66	28	11	2	1	1	1	1	1	1	1	1	1	117	1	
Floyd	2	45	76	72	29	8	7	5	5	5	2	1	1	1	173	161	294	173	
Fountain	8	47	103	116	56	32	29	10	9	5	4	4	2	2	1	1	214	1	
Franklin		19	74	80	33	12	4	3	7	4	1	1	1	1	1	2	120	2	
Fulton	5	39	89	75	28	13	13	11	4	3	2	1	1	1	1	1	143	1	

Gibson	42	188	117	60	29	18	7	7	4	2	3	3	..	..	..	15	100	299
Grant	16	133	263	73	38	22	19	18	7	4	3	3	..	..	..	5	4	467
Greene	3	12	22	8	6	15	1	1	6	3	2	3	..	..	..	95	76	36
Hamilton	4	102	159	35	32	12	8	8	1	..	..	..	2	..	..	..	1	391
Hancock	8	54	105	29	13	8	..	..	..	..	..	..	..	..	..	..	..	152
Harrison	2	18	101	99	26	16	3	2	5	1	..	..	..	..	..	..	..	138
Hendricks	1	34	106	93	28	19	10	6	7	3	..	3	..	..	..	..	..	155
Henry	3	55	167	144	37	19	19	12	6	2	2	1	..	..	..	1	2	235
Howard	4	64	162	142	47	26	19	10	8	2	2	3	1	..	..	1	1	246
Huntington	2	55	161	136	33	14	6	4	4	1	1	1	..	..	..	1	..	216
Jackson	20	78	118	95	51	26	18	12	4	4	3	1	..	..	..	..	..	215
Jasper	3	32	83	82	25	7	14	8	4	1	1	..	..	..	..	15	15	145
Jay	4	82	180	137	41	11	6	5	6	3	3	2	..	..	..	2	4	245
Jefferson	1	17	43	34	13	8	..	..	3	3	..	..	..	..	..	190	193	255
Jennings	..	27	71	68	30	15	11	5	2	2	4	..	..	..	..	1	2	119
Johnson	3	48	107	83	28	15	11	10	6	2	2	1	..	..	..	4	4	163
Knox	3	78	207	174	66	36	19	17	7	3	5	1	..	..	..	47	47	356
Kosciusko	18	108	197	160	48	21	15	7	13	4	2	1	..	..	..	8	1	302
Lagrange	6	50	91	63	15	4	8	6	4	1	1	1	..	..	..	..	..	255
Lake	3	75	204	179	48	14	16	4	2	1	..	..	..	..	..	..	..	125
Laporte	1	57	180	161	49	26	21	13	8	4	3	1	..	..	..	..	..	264
Lawrence	7	61	131	96	29	14	8	4	4	3	3	1	..	..	..	..	2	183
Madison	9	132	321	242	71	35	17	11	12	9	5	4	1	..	..	88	89	524
Marion	10	248	907	887	304	173	107	61	43	18	18	8	1	..	..	9	16	1,406
Marshall	8	80	136	90	23	7	7	6	8	5	2	..	4	1	..	..	..	189
Martin	..	27	64	46	9	5	6	4	2	1	2	..	..	..	..	..	..	83
Miami	5	39	127	114	26	18	19	15	10	2	1	2	..	..	..	2	2	101
Monroe	7	47	113	112	13	13	17	8	5	1	1	1	..	..	..	37	..	182
Montgomery	5	50	160	156	63	39	16	11	11	4	2	1	..	..	..	12	10	260
Morgan	15	69	124	96	33	18	15	15	8	2	2	..	1	..	..	..	..	210
Newton	18	54	49	18	17	7	4	4	3	3	3	..	..	..	..	22	22	104
Noble	2	32	109	93	17	10	2	2	4	4	4	1	..	..	..	..	..	142
Ohio	2	9	19	22	10	2	1	1	1	..	..	2	..	..	..	10	10	44
Orange	2	45	109	89	92	6	4	2	2	1	..	1	..	..	..	..	..	147
Owen	6	49	109	81	22	14	13	6	5	3	3	1	..	..	..	119	120	275
Parke	2	30	64	65	29	12	7	3	7	3	1	1	..	..	..	3	..	114
Perry	7	53	124	98	22	9	8	5	1	4	4	..	..	..	..	4	4	170
Pike	3	65	125	98	37	17	10	8	8	3	4	1	..	..	..	5	2	193
Porter	1	40	96	86	30	10	11	6	1	..	3	1	..	1	..	2	2	145
Posey	3	93	193	144	52	25	19	6	6	5	6	1	..	..	..	..	6	280

TABLE B—Continued.

COUNTIES.	GROUPED AGES.													
	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.	
	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.	Groom.	Bride.
Pulaski	26	63	47	12	5	2	3	1	3	4	1	3	1	1
Randolph	60	149	121	43	26	9	8	4	10	5	2	4	1	1
Ripley	12	220	161	43	21	12	10	5	8	5	4	2	200	200
Rush	2	104	83	28	9	5	6	1	1	1	1	1	2	2
Scott	3	43	26	10	9	4	4	4	4	1	2	1	4	9
Shelby	8	43	107	23	12	9	5	6	9	6	3	1	2	2
Spencer	5	196	150	39	19	11	10	3	10	3	4	2	1	3
Starke	13	22	12	6	7	4	3	4	6	4	4	1	1	1
Steuben	37	117	104	30	16	8	3	4	6	4	4	1	1	1
St. Joseph	2	263	232	71	46	31	17	3	10	3	4	1	1	2
Sullivan	9	67	110	26	16	9	3	4	10	4	4	1	2	2
Switzerland	2	38	85	19	10	8	4	3	3	1	1	1	10	10
Tippacanoe	1	82	241	88	39	16	11	7	10	7	1	2	2	2
Tipton	12	73	80	22	12	9	4	5	5	5	4	2	6	5
Union	9	42	44	9	1	4	3	2	2	3	4	1	1	1
Vanderburgh	5	122	481	178	76	54	30	9	20	9	9	1	4	5
Vermillion	23	63	49	16	9	6	1	2	2	2	2	1	4	4
Vigo	12	418	370	109	60	34	21	11	31	11	7	1	3	4
Wabash	53	173	158	43	31	18	8	1	5	1	1	1	1	25
Warren	1	17	42	12	8	5	2	1	1	2	1	1	26	26
Warrick	3	68	58	18	10	3	2	4	4	2	1	2	1	5
Washington	1	54	49	17	8	3	3	3	4	3	1	1	5	5
Total.	81	224	224	224	224	224	224	224	224	224	224	224	224	224

TABLE A.

Births by Months. Color and Nationality of Parents for the Year Ending September 30, 1896.

COUNTIES.	1895.				1896.									Total.	COLOR.				NATIONALITY.				NOT RE- PORTED.						
	October.	November.	December.		January.	February.	March.	April.	May.	June.	July.	August.	September.			Males.	Females.	WHITE.		COLOR'D.		AMERICAN.			FOREIGN.				
																		Males.	Females.	Males.	Females.	Fathers.	Mothers.	Fathers.	Mothers.				
Adams	49	21	14	26	17	30	25	25	22	17	17	23	36	157	148	305	303	296	303	297	600	240	247	22	11	43	47		
Allen	76	59	25	95	67	97	33	67	56	47	39	45	38	312	327	643	329	329	312	329	643	377	434	157	124	102	78		
Bartholomew	34	32	19	67	41	53	47	41	230	239	469	226	229	226	229	469	226	229	226	229	469	445	461	21	2	7	10		
Benton	25	20	17	21	12	24	16	18	10	16	17	21	128	97	225	125	225	125	97	201	186	201	186	201	21	14	18	15	
Blackford	4	5	10	14	4	7	4	14	10	9	8	11	56	50	106	56	106	56	50	87	84	87	84	87	5	4	17	10	
Boone	61	63	68	43	48	40	22	24	23	63	67	78	303	296	600	303	600	296	296	303	297	600	321	321	2	2	277	277	8
Brown	14	17	6	10	11	16	9	3	8	15	18	22	81	68	119	81	119	68	68	81	138	138	138	138	2	2	8	8	
Carroll	31	35	19	65	23	36	33	33	5	34	15	12	127	150	277	127	277	150	150	127	249	249	249	249	42	37	22	25	
Cass	18	22	22	39	34	30	32	33	14	31	22	19	173	148	321	172	321	148	148	172	223	223	223	223	6	2	51	51	
Clark	25	16	16	22	18	7	15	19	30	21	22	28	109	119	240	99	240	119	119	99	119	123	119	123	42	2	111	111	11
Clay	33	35	35	71	49	43	30	48	32	33	33	30	250	222	472	247	472	247	215	379	415	70	45	70	45	20	9	20	9
Clinton	8	13	6	10	12	7	13	20	18	7	8	1	64	60	123	62	123	60	60	62	116	116	116	116	1	1	2	2	2
Crawford	7	6	4	5	1	4	4	4	2	15	11	12	26	38	61	26	61	38	38	38	38	38	38	38	1	1	23	23	2
Davies	34	32	42	42	45	40	36	41	20	15	22	23	189	210	188	210	213	188	210	377	391	7	2	377	391	15	6	15	6
Dearborn	48	23	22	20	14	16	20	21	23	30	22	23	104	103	207	104	207	104	104	179	194	22	11	179	194	6	2	6	2
Decatur	23	24	18	31	19	19	30	22	24	24	25	17	151	125	276	151	276	125	125	260	261	8	8	260	261	5	4	5	4
Dekalb	17	7	7	7	5	10	15	15	19	8	14	6	66	67	133	66	133	66	67	130	130	5	5	130	130	2	2	2	2
Delaware	79	59	73	68	30	38	66	67	61	57	90	62	368	382	750	365	750	380	380	683	715	53	53	683	715	10	10	22	22
Dubois	40	28	50	32	34	38	30	35	28	35	32	32	231	183	414	231	414	231	183	395	404	14	14	395	404	1	1	1	1
Elkhart	56	44	49	87	52	98	188	82	73	73	67	55	463	461	924	462	924	459	459	856	884	27	27	856	884	34	34	34	34
Fayette	24	16	18	15	13	12	15	16	17	12	14	14	90	96	186	87	186	95	95	178	181	6	6	178	181	3	3	3	3
Floyd	25	19	24	29	36	26	25	22	6	25	17	4	131	131	262	119	262	119	123	224	228	16	16	224	228	10	10	21	23
Fountain	24	16	18	26	20	25	21	25	19	29	30	12	142	133	275	141	275	133	133	134	139	24	24	133	139	115	115	115	115
Franklin	22	14	18	15	15	7	13	6	9	9	8	15	82	69	151	82	151	69	69	133	134	6	6	133	134	1	1	9	9
Fulton	19	27	8	19	17	12	13	13	3	48	16	17	101	111	212	101	212	111	111	197	201	3	3	197	201	5	5	11	9

Gibson	74	50	54	30	35	36	61	83	24	39	47	35	280	238	518	270	229	10	9	435	453	11	4	59	48
Grant	100	89	36	53	33	45	56	44	41	38	44	16	316	279	595	309	276	7	3	533	544	37	29	18	15
Greene	37	15	12	32	32	36	21	7	14	23	20	26	124	151	275	124	151	3	2	242	243	13	30	26	26
Hamilton	37	21	30	55	32	32	42	14	30	58	36	40	226	192	418	223	190	1	1	401	403	13	11	4	4
Hancock	41	21	33	38	43	26	39	41	30	33	34	29	207	203	410	206	202	1	1	391	400	9	2	6	4
Harrison	25	21	7	22	13	22	8	12	5	35	28	25	112	111	223	110	110	2	3	223	223	3	1	2	2
Hendricks	33	28	13	27	19	33	34	20	24	42	20	18	159	162	317	159	161	4	5	317	318	3	5	9	5
Henry	32	40	47	29	40	51	23	22	53	22	48	52	215	218	463	233	233	4	1	463	466	4	2	22	24
Howard	82	16	31	28	37	25	13	17	27	15	15	21	134	128	262	134	127	1	1	235	234	2	4	48	51
Huntington	32	33	18	39	31	39	37	23	37	22	25	25	200	16	36	200	160	1	1	365	305	7	4	48	51
Jackson	19	15	8	33	15	13	20	17	13	9	21	11	103	91	194	103	91	1	1	92	94	3	4	99	96
Jasper	9	10	10	21	4	12	27	27	16	17	20	8	103	87	190	103	87	1	1	160	165	7	6	17	13
Jay	40	34	24	56	19	20	65	35	18	41	34	34	234	185	420	233	185	1	1	384	409	16	6	18	3
Jefferson	19	15	5	10	10	13	13	11	12	7	10	5	55	75	130	55	75	4	2	37	41	4	4	92	89
Jennings	12	13	12	17	10	14	17	16	15	13	16	1	83	63	146	79	62	4	2	142	146	4	4	92	89
Johnson	48	35	25	29	34	31	37	34	23	30	36	45	212	185	407	209	185	3	3	151	151	4	4	252	252
Knox	40	18	7	15	11	11	29	17	1	37	17	21	121	103	227	122	99	2	4	65	65	3	2	158	158
Kosciusko	50	35	9	33	22	13	22	16	22	31	14	33	172	127	259	171	127	1	1	254	254	3	2	42	43
Lagrange	37	11	13	16	19	21	34	20	19	19	23	14	128	121	249	128	121	1	1	224	237	11	3	11	6
Lake	25	40	22	39	51	31	31	31	22	22	20	30	149	135	284	149	135	1	1	169	173	115	109	2	2
Laporte	61	61	47	52	55	62	38	50	42	57	46	51	326	296	622	322	295	4	1	362	422	240	185	12	6
Lawrence	15	10	10	10	10	11	24	17	19	47	48	35	144	112	256	143	111	1	1	237	246	3	6	14	8
Madison	130	89	7	102	79	84	67	88	72	101	88	57	532	495	1,027	528	494	4	1	879	915	100	79	37	22
Marion	209	209	231	273	220	226	279	276	261	279	315	281	1,607	1,546	3,112	1,472	1,378	135	127	2,177	2,382	660	469	235	221
Marshall	30	29	44	26	20	35	6	6	6	13	20	22	124	133	257	124	133	1	1	243	245	13	12	1	1
Martin	2	5	4	4	5	6	7	8	3	4	1	5	21	29	50	21	29	1	1	50	50	7	6	21	22
Miami	8	5	8	3	1	2	6	7	1	4	32	4	32	24	56	32	24	1	1	28	28	7	6	21	22
Monroe	13	11	20	26	24	36	38	31	26	45	82	25	167	160	327	164	158	3	2	135	138	3	3	187	187
Montgomery	34	29	42	34	27	27	15	17	15	20	46	34	187	161	343	186	161	1	1	343	345	2	2	51	59
Morgan	23	29	31	22	15	17	16	14	22	34	21	24	135	133	268	135	133	1	1	215	207	1	1	51	59
Newton	19	13	13	4	4	6	3	11	7	15	16	17	68	60	121	62	60	1	1	85	90	13	9	30	29
Noble	5	4	1	9	3	7	4	5	7	10	6	3	43	33	76	43	33	2	4	71	65	3	3	5	8
Ohio	9	4	5	11	9	5	9	7	3	6	5	3	36	40	75	34	36	2	4	72	73	1	1	4	3
Orange	26	4	4	13	6	2	21	5	2	22	9	5	57	62	119	57	62	1	1	30	30	1	1	88	88
Owen	17	10	11	16	17	8	17	18	8	23	15	15	91	78	169	91	77	1	1	166	167	1	1	1	1

Wabash . . .	8	5	6	40	30	22	19	23	27	16	24	36	121	116	237	121	116	..	234	236	2	..	2	..	6	4
Warren . . .	26	25	33	41	14	10	6	10	10	8	6	6	49	47	96	49	47	..	81	86	2	..	2	..	6	4
Warwick	34	21	24	19	14	14	23	26	19	163	142	305	151	137	5	292	302	12	..	2	..	6	4
Washington	18	16	20	10	11	9	40	44	84	40	44	..	84	84	6	4
Wayne . . .	59	41	43	57	78	62	40	53	49	65	55	50	346	306	652	333	292	13	603	615	32	25	25	8	3	
Wells . . .	25	11	14	47	18	13	17	12	12	18	12	14	131	82	213	131	82	..	207	210	..	..	..	3	3
White . . .	16	19	16	..	..	..	22	14	31	16	16	7	74	83	157	74	83	..	82	85	6	4	4	69	68
Whitley . . .	31	24	12	2	7	22	15	6	7	2	9	6	77	66	143	77	65	1	139	138	1	2	2	2	2	
Total . . .	3,288	2,378	2,295	3,150	2,458	2,618	2,795	2,524	2,198	2,823	2,681	2,370	16,301	15,277	31,578	15,927	14,937	382	25,507	26,399	2,598	1,944	..	3,162	2920	

Births, Number of Children Born to Each Mother, Grouped Ages of Par-

COUNTIES.	Total.	NUMBER OF CHILDREN BORN TO EACH MOTHER.												
		First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth and Over.	Not Reported.
Adams	305	88	59	38	33	27	22	14	9	6	1	3	4	1
Allen	643	154	112	75	70	61	41	28	17	6	8	2	3	66
Bartholomew	469	124	106	76	53	29	26	18	16	6	1	2	5	7
Benton	225	61	54	37	26	20	14	4	7	1	1	1	1	1
Blackford	106	31	24	8	13	12	2	7	6	2	1	1	1	1
Boone	600	151	120	98	80	61	34	22	18	8	3	4	1	1
Brown	149	45	20	17	14	16	11	10	7	2	2	3	1	1
Carroll	277	70	56	44	37	22	13	14	8	8	4	1	1	1
Cass	321	76	62	40	31	26	14	9	4	4	1	1	2	14
Clark	240	54	57	40	17	22	11	11	8	5	5	1	6	3
Clay	472	116	103	54	52	43	21	37	19	6	9	2	5	5
Clinton	123	41	21	14	11	14	4	3	3	3	3	1	1	1
Crawford	64	13	8	9	5	6	1	2	2	1	3	1	1	13
Daviess	402	99	64	72	61	36	18	16	16	3	8	2	4	3
Dearborn	207	52	55	27	26	14	11	6	5	4	4	3	1	1
Decatur	276	77	53	58	22	12	8	6	7	7	2	3	5	16
Dekalb	133	39	27	22	20	9	5	2	1	3	1	2	1	1
Delaware	750	212	147	110	95	66	38	25	28	9	6	8	1	5
Dubois	414	95	60	71	57	36	30	34	9	9	4	3	3	3
Elkhart	924	259	161	138	99	82	38	33	21	16	8	4	3	62
Fayette	186	49	49	33	20	5	8	8	6	1	2	3	2	8
Floyd	262	64	59	41	30	20	19	7	6	4	2	1	2	5
Fountain	275	80	44	47	37	22	15	11	6	7	1	1	1	2
Franklin	151	37	37	21	20	10	4	9	2	1	3	1	4	2
Fulton	212	67	37	38	27	9	6	14	5	3	1	1	1	4
Gibson	518	141	118	82	56	37	23	14	13	8	9	5	3	9
Grant	595	158	153	95	59	38	27	23	13	8	3	1	6	11
Greene	275	83	42	37	43	19	19	15	6	3	4	3	1	1
Hamilton	418	124	72	62	48	38	26	14	10	9	5	1	1	8
Hancock	410	119	77	64	53	22	24	14	15	7	6	2	1	6
Harrison	223	64	41	41	20	14	17	5	5	6	2	3	5	1
Hendricks	321	88	67	58	32	28	21	9	7	5	3	1	1	1
Henry	483	156	108	65	56	31	16	14	11	10	5	5	2	4
Howard	262	75	66	40	30	23	12	6	7	1	1	1	1	1
Huntington	360	120	80	46	44	24	14	19	7	4	2	1	1	1
Jackson	194	53	36	34	16	21	7	7	8	5	2	4	1	1
Jasper	190	56	39	21	18	21	7	13	8	2	2	1	2	1
Jay	420	137	96	50	48	23	22	11	10	13	4	3	1	2
Jefferson	130	38	31	23	9	9	6	5	2	1	1	2	2	2
Jennings	146	34	25	26	16	12	7	11	5	4	1	2	1	2
Johnson	407	99	101	68	43	31	19	11	10	10	5	1	5	4
Knox	227	65	44	39	27	14	15	6	10	6	1	1	1	1
Kosciusko	299	86	64	53	34	27	17	9	5	1	2	1	2	1
Lagrange	249	79	57	38	20	23	14	12	3	1	1	1	1	2
Lake	244	60	55	40	50	30	18	14	8	6	2	1	1	1
Laporte	622	157	121	90	71	60	42	25	20	11	6	7	10	2
Lawrence	256	78	50	42	35	14	10	8	6	5	2	1	1	4
Madison	1,027	309	230	162	89	82	69	24	20	18	15	5	2	2
Marion	3,112	987	669	491	298	215	151	109	62	23	42	15	18	32
Marshall	257	79	52	39	25	16	22	12	5	1	1	1	4	1

LE B.

ents, Still, Plurality and Illegitimate Births, Year Ending Sept. 30, 1896.

GROUPED AGES OF PARENTS.														STILL BIRTHS.		PLURALITY BIRTHS.		ILLEGITIMATE BIRTHS.	
Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.	70 to 80.	Not Reported.		Male.	Female.	Male.	Female.	Male.	Female.
Father.	Mother.	Father.	Mother.	Father.	Mother.	Father.	Mother.	Father.	Mother.	Father.	Father.	Father.	Mother.	Male.	Female.	Male.	Female.	Male.	Female.
2	14	123	174	105	97	60	16	6	12	2	..	9	4	3	4	7	7	8	5
1	22	148	241	229	204	121	81	37	..	..	..	98	76	15	11	7	..	4	..
2	50	219	268	157	117	64	24	13	..	..	..	8	4	8	5	8	4	4	5
..	13	78	130	89	57	36	17	9	..	3	..	10	8	1	..	..	..	..	..
..	11	57	60	26	21	15	6	3	..	..	..	5	8	1	..	..	..	..	..
1	53	253	339	227	182	85	21	24	..	6	..	3	3	4	4	2	2	..	..
4	15	38	60	43	52	20	10	3	..	..	..	40	11	1	..	2	..	..	1
1	15	116	159	103	76	45	21	8	..	1	..	..	3	..	..	3	3	1	..
1	14	82	144	125	94	47	11	6	..	4	..	51	53	3	..	4	5	..	..
..	20	98	110	84	58	37	11	7	..	1	..	9	37	1	1	2	6	1	..
2	45	188	244	167	146	87	23	12	..	3	..	10	11	4	4	1	5	6	3
2	15	58	65	44	32	12	5	..	..	..	..	3	2	..	..	6	2	..	1
..	5	19	25	13	6	2	2	..	..	..	..	22	17	2	..	2	2	1	2
4	29	163	223	140	105	62	32	16	1	1	1	12	9	5	4	2	4	2	6
2	16	70	101	84	74	37	13	8	..	1	..	5	3	1	2	1	1	2	1
1	15	104	157	89	67	43	15	8	..	..	..	28	19	..	..	5	1	..	..
2	11	38	48	35	34	15	2	..	..	..	..	42	37	2	3	..	3	..	1
1	72	325	432	287	196	95	36	8	..	1	..	29	10	15	11	5	3	6	10
..	19	151	221	178	149	69	20	7	..	2	..	3	1	2	3	4	4	3	3
5	93	366	408	263	211	130	62	30	..	2	..	111	143	7	7	6	8	3	5
1	15	82	110	68	47	27	9	3	..	..	..	3	3	5	..	2	2	1	..
6	14	110	116	97	103	31	13	3	1	..	..	13	14	3	2	2	..	..	5
29	69	100	109	78	67	43	25	15	..	3	..	5	3	..	..	1	3	3	1
4	11	49	75	46	43	23	10	7	..	5	..	14	9	..	..	4	2	..	1
..	25	95	119	78	48	24	10	..	1	..	..	13	9	4	2	2	..	..	1
1	48	215	276	188	149	57	16	16	..	3	..	25	16	9	1	15	11	11	5
3	63	279	347	210	146	64	20	13	..	1	1	17	12	5	9	6	8	5	..
24	31	111	128	83	70	25	15	1	..	1	..	27	28	5	5	2	4	1	4
3	42	172	223	149	125	61	16	9	..	1	..	19	8	9	4	7	1	3	5
2	36	173	224	150	113	59	19	15	..	..	..	6	14	7	4	5	3	3	2
..	44	105	96	76	73	13	8	4	..	..	..	25	2	2	..	3	1	..	2
2	29	127	174	109	99	47	16	9	..	2	..	25	3	2	4	..	..	..	3
4	52	225	270	182	129	50	16	5	..	..	1	9	9	17	1	4	10	2	5
6	32	127	148	91	63	26	9	..	..	..	..	10	8	..	..	1	3	..	7
21	65	197	186	107	98	29	10	4	..	..	..	2	1	..	..	..	..	..	1
42	19	102	91	37	38	12	23	1	2	..	..	..	21	..	..	..	..	..	2
..	16	70	94	78	65	23	6	5	..	..	..	9	4	1	..	6	4	3	1
2	48	183	213	144	86	58	14	9	..	1	..	16	57	8	5	2	2	8	4
..	7	51	67	47	39	22	12	4	..	..	..	5	4	2	1	1	1	2	..
1	10	50	84	65	38	23	8	1	..	..	..	5	5	..	..	2	..	..	..
5	24	180	208	148	121	47	34	10	4	3	..	14	16	10	5	5	3	..	..
1	21	98	128	82	66	28	6	5	..	1	..	8	2	3	..	..	..	..	3
2	29	126	174	110	71	42	10	6	..	..	..	13	15	3	2	..	..	2	1
1	24	85	108	89	74	29	9	5	..	..	2	35	31	3	2	3	3	1	2
1	36	129	167	120	65	27	13	5	..	..	..	2	3	..	..	..	..	..	..
1	45	224	325	279	200	81	33	16	..	2	..	11	11	15	11	7	9	3	2
..	32	106	132	89	65	27	7	5	..	1	..	26	18	..	..	1	3	5	2
7	111	486	599	349	250	118	42	13	..	1	1	41	14	7	5	11	10	12	4
38	251	1,319	1,692	1,131	832	336	166	38	..	9	..	201	131	57	44	48	29	68	58
12	32	105	132	88	76	43	14	5	2	1	..	3	1	..	..	..	2	2	3

TABLE B—

COUNTIES.	NUMBER OF CHILDREN BORN TO EACH MOTHER.													
	Total.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth and Over.	Not Reported.
Martin	50	13	9	4	4	8	3	2	1	1	2	1	1	3
Miami	56	14	10	11	7	5	4	1	1	1	1	1	1	3
Monroe	327	91	62	51	39	28	14	15	9	9	5	1	3	4
Montgomery	348	120	80	47	39	20	19	9	7	4	1	1	1	4
Morgan	268	51	45	37	33	17	10	16	7	6	3	3	2	38
Newton	128	40	15	17	12	4	6	5	2	3	1	1	5	17
Noble	76	25	23	10	9	3	5	1	1	1	1	1	1	1
Ohio	76	24	13	11	7	10	3	1	1	1	1	1	3	1
Orange	119	22	23	24	20	12	9	1	4	2	1	1	2	2
Owen	169	42	38	25	21	9	8	8	6	2	4	1	2	3
Parke	83	19	20	12	15	5	4	2	4	1	1	1	1	2
Perry	194	40	49	21	25	22	16	6	4	6	1	1	1	1
Pike	116	25	18	21	19	11	9	7	2	1	1	1	3	1
Porter	204	65	37	17	24	18	16	5	8	6	3	3	3	2
Posey	549	150	111	84	63	39	41	19	12	12	7	3	4	4
Pulaski	133	30	22	21	19	5	9	6	4	2	3	3	6	3
Putnam	431	130	92	77	39	25	29	11	9	7	3	3	4	5
Randolph	586	173	125	90	69	41	31	24	9	6	4	2	3	3
Ripley	276	72	51	52	25	25	17	15	4	6	4	2	3	2
Rush	301	77	66	47	36	24	18	8	7	6	7	1	3	1
Scott	162	38	28	15	20	20	9	5	4	9	9	3	2	1
Shelby	349	98	73	46	32	37	13	9	11	7	8	3	3	9
Spencer	377	110	64	45	41	33	25	23	16	9	1	2	1	8
Starke	123	35	16	21	15	6	8	6	4	2	2	1	1	7
Steuben	203	51	36	18	13	6	4	2	1	3	1	1	1	69
St. Joseph	477	120	81	83	56	51	25	15	17	12	3	5	5	4
Sullivan	284	69	57	32	54	20	19	17	5	3	2	1	3	3
Switzerland	140	43	24	35	15	6	4	4	2	1	2	1	1	4
Tippecanoe	416	128	85	70	38	27	22	16	8	5	4	1	3	10
Tipton	350	91	62	53	35	29	32	10	10	8	5	1	5	9
Union	99	37	20	16	11	4	6	1	2	1	1	1	1	1
Vanderburgh	1,326	306	303	193	145	103	91	57	33	17	21	13	3	41
Vermillion	94	20	29	15	8	9	5	1	3	1	1	1	1	1
Vigo	929	239	204	148	111	56	61	39	22	8	7	4	10	20
Wabash	237	85	63	41	16	12	6	4	3	1	1	1	1	5
Warren	96	27	18	20	8	8	4	4	2	1	1	1	1	5
Warrick	305	71	83	47	20	23	16	13	10	8	5	5	3	1
Washington	86	23	22	14	10	6	6	3	2	1	1	1	1	1
Wayne	651	203	138	104	58	41	37	23	12	15	9	6	3	3
Wells	213	32	28	30	24	9	11	11	1	2	1	2	3	9
White	157	52	29	30	17	14	6	4	1	1	1	2	1	1
Whitley	143	40	35	24	21	5	3	3	6	1	1	1	1	4
Total	31,578	8,790	6,496	4,815	3,498	2,413	1,732	1,195	792	485	337	178	220	627

Continued.

GROUP. D AGES OF PARENTS														STILL BIRTHS.		PLURALITY BIRTHS.		ILLEGITIMATE BIRTHS.	
Under 20		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70	70 to 80	Not Reported.		Male.	Female.	Male.	Female.	Male.	Female.
Father.	Mother.	Father.	Mother.	Father.	Mother.	Father.	Mother.	Father.	Mother.	Father.	Father.	Father.	Mother.						
14	6	19	24	21	13	7	6	3					1					2	
2	1	19	28	21	14	3	2					10	11					1	
8	21	168	125	104	51	37	8	1				120	2			4		6	1
	28	143	210	137	96	48	9	8				7	2		1	5		1	2
	32	78	99	55	46	27	10	14		4		80	79		1	2		6	3
	5	28	41	32	25	14	9	4				50	48						
	6	36	47	32	19	4	1	1				3	3	1	1				
	3	31	43	29	23	10	6	4				2	1						1
1	7	48	54	56	50	8	6	4				1	1			1	1		
1	21	68	82	56	47	29	10	6		2		5	7			1	3		
1	14	40	44	26	21	10	2	5				1	2						
1	11	68	109	92	57	20	4	2		2		8	11	1		2	2	4	
16	10	47	68	42	25	18	6	3				4	5		1	2	2	2	
5	2	83	63	46	67	19	26	6				38	38	4	4	3	1	2	1
	65	224	287	202	135	73	17	10		1		26	37	9	11	5	11	8	5
3	13	48	63	54	43	24	12	2		1		3	1	3	3	2			2
11	40	170	212	158	118	62	17	10		2	2	19	9	7	5	6	4	6	4
1	72	275	313	182	144	70	32	14		2		26	19	13	9	7	5	7	7
1	24	32	83	60	29	28	2					150	143	1	1	8	2	1	1
	22	129	177	122	89	41	11	3				3		1		4		2	1
2	20	64	77	57	46	23	15	8		2		6	4						
1	29	133	176	127	107	59	26	8	2			20	8	1	3	1	1	2	4
3	36	136	183	136	111	58	18	8		1	1	26	21	3	1	9	7	6	3
	12	51	67	36	37	25	3	3		1		4	2			2	2		
	9	62	69	42	45	16	3	5				75	74	3	1	2	4	1	3
3	35	176	254	205	154	65	20	6				18	10	5	5	2	6	3	
	28	114	147	102	83	38	10	11	1			17	13	1	1	2	2	3	1
	8	50	53	44	31	10	4	3				33	39	1					
4	23	141	224	168	125	64	22	11		1	1	25	17	2	3	6	4		2
	57	155	170	117	100	35	10	9				23	6	3		9	4	1	
2	5	49	47	38	29	3	1	2	1	1		4	6	4	1				
3	73	378	707	502	425	155	57	19		1		256	52	55	33	13	11	29	25
6	38	54	35	28	15	5	6						1	2					
3	65	383	540	369	254	109	33	16		2		42	32	20	19	5	5	9	14
4	31	128	133	81	58	16	11	4				3	3			2			
1	15	40	51	33	16	10	2					10	9	3	4	3	4	1	
	29	132	186	162	66	32	9	7		4		26	14	2		1	1	2	1
												86	86						
3	52	274	363	241	191	95	35	12		5		13	2	11	7	10	6	9	7
2	25	93	105	69	63	25	6	4				17	11	1		6			3
2	26	72	84	56	43	21	4	1				5						1	
2	73	69	84	50	36	17	5					4	4	4	5	1	1	3	
357	2,920	12,688	15,776	10,189	8,591	3,959	1,533	660	33	94	11	2,250	1,873	412	288	323	264	294	258

TABLE A.

Deaths by Counties for the Year Ending September 30, 1896.

COUNTIES.	1895.			1896.									Total.	
	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.		
Adams	16	6	1	12	9	2	4	2	2	6	4	8	6	76
Allen	27	27	5	90	58	50	2	49	45	41	77	63	37	534
Bartholomew	42	23	12	54	32	24	38	20	20	25	35	37	37	362
Benton	3	2	1	5	7	9	3	2	1	5	5	9	5	52
Blackford	3	4	3	1	2	1	2	1	5	3	9	5	5	39
Boone	27	22	12	25	17	23	16	16	8	15	16	14	14	211
Brown	3	7	2	3	5	6	1	2	3	7	2	6	6	47
Carroll	12	4	5	13	9	4	12	4	3	11	10	5	5	92
Cass	29	17	24	21	21	27	34	27	12	25	25	20	20	282
Clark	11	9	6	20	3	10	16	9	7	16	19	13	13	130
Clay	6	13	4	13	13	25	18	11	10	7	12	11	11	143
Clinton	9	14	8	5	10	11	13	2	9	15	4	4	4	104
Crawford	5	1	2	2	1	1	2	6	6	11	6	1	1	18
Daviess	17	12	14	15	20	17	9	6	6	11	10	9	9	146
Dearborn	35	12	16	11	9	5	11	14	7	1	1	1	1	120
Decatur	12	10	9	13	9	13	8	14	10	17	13	10	10	138
Dekalb	7	5	3	3	3	3	6	7	6	11	6	6	6	57
Delaware	36	30	19	29	35	31	29	23	21	43	40	31	31	367
Dubois	14	15	18	10	11	15	17	13	6	19	20	21	21	178
Elkhart	32	21	20	26	34	24	65	24	22	23	23	24	24	338
Fayette	13	10	5	8	9	5	6	9	8	8	10	4	4	95
Floyd	3	9	20	41	9	14	16	10	9	15	19	1	1	143
Fountain	5	5	3	13	9	14	3	8	5	6	4	4	4	79
Franklin	16	16	19	9	14	11	16	8	13	12	8	3	3	145
Fulton	8	8	2	4	9	4	7	4	13	10	10	2	2	81

Gibson	20	3	29	23	25	23	20	13	22	26	25	14	243
Grant	35	26	20	12	10	21	29	16	11	22	12	5	219
Greene	14	4	8	15	8	5	7	2	3	13	5	8	72
Hamilton	16	8	9	18	19	16	21	15	13	21	24	8	148
Hancock	30	16	9	16	15	16	13	15	13	9	18	16	190
Harrison	3	9	..	16	7	5	..	..	7	6	2	2	57
Hendricks	9	7	4	17	4	17	20	4	7	19	11	13	132
Henry	24	24	12	20	18	25	16	11	19	13	14	16	212
Howard	12	6	4	5	12	17	5	2	12	13	3	3	94
Huntington	24	19	14	21	13	7	19	15	23	20	36	29	240
Jackson	4	5	4	7	18	5	16	5	..	4	4	3	15
Jasper	7	9	4	5	2	4	4	6	..	3	4	7	56
Jay	19	15	11	19	5	7	19	7	7	13	11	25	158
Jefferson	5	1	3	4	7	4	8	3	2	9	9	3	49
Jennings	9	8	6	7	4	7	8	3	3	9	6	7	77
Johnson	32	4	14	23	25	12	21	13	10	25	10	9	198
Knox	10	15	2	7	4	3	10	4	4	1	9	9	78
Kosciusko	16	10	8	11	2	12	9	6	7	4	16	12	113
Lagrange	8	7	9	16	14	15	17	10	11	14	14	13	148
Lake	13	23	9	19	18	23	..	..	..	21	38	36	200
Laporte	29	34	21	28	23	31	27	29	21	19	45	28	335
Lawrence	5	7	7	3	2	2	6	3	13	6	16	14	84
Madison	39	26	15	30	25	18	28	20	21	26	23	39	313
Marion	247	171	175	197	157	166	196	174	231	254	209	196	2,373
Marshall	6	16	12	11	8	5	4	3	2	6	4	7	84
Martin	1	..	2	..	..	..	5	1	4	4	2	3	22
Miami	2	10	5	2	2	8	6	4	1	2	8	8	35
Monroe	3	4	5	16	6	6	14	5	11	8	10	8	98
Montgomery	14	14	11	23	6	6	11	7	9	17	19	9	146
Morgan	11	12	9	7	10	8	7	9	5	10	9	8	105
Newton	3	4	2	1	..	1	2	3	2	4	3	2	97
Noble	8	2	3	5	1	2	2	3	1	3	2	2	25
Ohio	4	2	3	5	5	2	6	5	4	3	1	2	43
Orange	10	6	..	4	6	9	6	1	1	5	4	14	48
Owen	4	6	2	2	6	3	4	2	3	11	8	5	56
Parke	..	..	..	1	1	..	..	..	5	7	3	2	19
Perry	14	8	1	9	7	6	6	8	12	6	8	6	91
Pike	..	2	1	3	..	3	2	2	2	2	6	7	24
Porter	19	8	9	16	16	8	11	15	6	34	13	7	120
Posey	44	17	19	32	13	27	19	15	22	3	42	22	306

TABLE B.

Causes of Death by Months, Sex and Color, Year Ending September 30, 1896.

CLASS ONE—ZYMOTIC DISEASES.	1895.			1896.									WHITE.		COLORED.		Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Male.	Fem.			
ORDER ONE—MIASMATIC.																	
Anthrax	5	1											1	1		2	
Chill, congestive	56	9	9	5						154	126	53	12	250	5	8	
Cholera infantum										3	5	2	14	14		490	
Cholera morbus										8	5	9	106	92	1	20	
Group	35	37	29	29	22	14	8	6	2	12	13	7	49	18		189	
Diarrhea	5	4	6	4	3	3	6	2	2	22	22	9	364	342	7	67	
Diphtheria	142	88	67	57	52	32	32	22	21	62	56	41	111	103	7	717	
Dysentery	31	6	7	7	1	2	3	6	17	31	27	17	49	68	1	222	
Eutero colitis	17	2	2	6	10	8	10	3	3	3	3	3	31	31	1	125	
Erysipelas	5	3	4	3	3	1	3	5	1		2	2	14	4	8	17	
Fever, catarrhal		2	4	1	1								3	2	1	13	
Fever, cerebro-spinal	4	2	4							13	22	15	45	60		6	
Fever, congestive	1			7	4	2	5	2		1	1	1	10	36	4	109	
Fever, confusional	19	9	3	4	7	4	5	5	1	1	1	4	2	2		36	
Fever, malarial	3	3	3	1	1	1	1	1	1	3	2	4	49	46	2	24	
Fever, puerperal	3	3	3	5	1	1	1	1	1	1	1	1	11	22		46	
Fever, remittent	13	13	13	18	3	7	11	10	2	62	86	135	483	464	11	980	
Fever, scarlet	8	10	77	65	39	33	26	26	21	4	3	3	13	16	1	30	
Fever, typhoid	241	169	77	1	1	1	3	1	1	5	3	1	16	9		25	
Fever, typho-malarial	5	13	1	1	4		3	3	5	3			13	16	5	174	
Gangrene	1	4		46	28	36	34	5	3	3			68	98		25	
La grippe	6	2	7	3	1	1	11	5	3	3			14	20	34	14	
Measles	2			3	3	6	11	3	1				18	26	44	49	
Peritonitis, puerperal	21	1		3	1	1	2	3	1				47	44	1	91	
Pertussis	1	3		1	6	1	6	13	2	7	2	8	8	7		31	
Pyæmia	1	4	4	13	10	9	6	1	1	1							
Septicæmia, puerperal	4	3		2	6	3	2								3		
Small-pox																	
Total	596	377	238	283	207	166	182	144	194	403	424	438	1,754	1,785	46	67	
Total																3,652	

TABLE B—Continued.

CLASS ONE—ZYMOTIC DISEASES.	1895.			1896.									WHITE.		COLORED.		Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Male.	Fem.			
ORDER TWO—EXTHETIC.																	
Syphilis	2	1	...	2	2	3	...	1	1	3	..	3	8	9	1	18	
Total	2	1	.	2	2	3	.	1	1	3	..	3	8	9	1	18	
ORDER THREE—DIETIC.																	
Delirium tremens	1	30	17	21	14	1	22	23	35	47	51	38	2	140	14	2	
Inanition	42	1	1	1	1	1	1	1	2	2	1	..	192	8	1	364	
Intemperance	1	1	...	1	1	1	...	...	...	...	...	..	1	1	..	9
Purpura	44	31	18	22	15	27	22	23	35	49	52	38	203	140	14	376	
Total	44	31	18	22	15	27	22	23	35	49	52	38	203	140	14	376	

TABLE B—Continued.

CLASS TWO—CONSTITUTIONAL.	1895.			1896.									WHITE.		COLORED.		Total.	
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Male.	Fem.	Male.	Fem.		
ORDER ONE—DIATHETIC.																		
Anæmia	29	31	1	3	29	5	1	2	1	2	6	3		8	16			24
Cancer	13	10	23	44	20	38	41	27	43	33	42	33		135	246	13	19	413
Dropsy	1		12	25	2	14	15	13	20	21	19	12		97	85	8	4	194
Goutre				2		1	1	1		1					5		1	6
Leucocythæmia																		
Rheumatism	4	2	4	6	5	7	10	3	3	3	2	8		24	33			57
Total	47	43	40	80	54	66	68	46	67	60	69	56		265	385	21	24	636
ORDER TWO—TUBERCULAR.																		
Hydrocephalus				2	1		2		2		1	1		5	3		1	9
Meningitis, tubercular	3	3		6	3	5	10	3	6		5	1		18	26	1	1	46
Phthisis	156	130	121	186	168	191	220	160	160	165	168	131		772	1,032	75	77	1,956
Scrofula	2	3		3	1	3	1	2	1	5	4	7		12	20			32
Tabes mesenterica	3	6	1	3		1					1	2		5	12			17
Total	164	142	122	200	173	200	233	165	169	171	179	142		812	1,093	76	79	2,060

TABLE B—Continued.

CLASS THREE—LOCAL DISEASES.	1895.					1893.							WHITE.		COLORED.		Total.
	1895.		Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Male.	Fem.	Male.	Fem.	
	Oct.	Nov.															
ORDER ONE—NERVOUS.																	
Apoplexy.	29	19	23	31	19	20	16	14	12	14	10	9	115	94	2	5	216
Brain abscess.		1			1			1			1		2				4
Brain congestion	11	6	4	4	3	6	12	4	7	22	9	10	46	50		2	98
Brain disease	35	17	16	29	23	21	18	15	13	35	31	21	147	100	14	11	272
Brain fever	8	1	2	3	1	1	2	2		2	6	3	16	13			30
Brain softening	2	1	4	6	3	2	2	2	4			1	16	14	1	1	31
Cerebral hemorrhage							7	6	3	5	3	2	16	10			26
Cerebritis	7	1	1	2	4	2	9	1	1	1	6	4	20	18		1	39
Convulsions	12	10	7	28	19	11	14	10	10	21	20	17	98	70	4	7	179
Epilepsy	3	1		3	1	1	5	3	2	1	5	2	14	8		2	24
Insanity	2		1	2		1		3	4	1	1	1	12	9			21
Locomotor ataxia				1				2	1				7	1			8
Meningitis	23	19	17	24	32	25	30	19	22	45	42	21	157	139	12	11	319
Meningitis, cerebral	3		1	3	3	8	3	3		2	1	5	14	18			32
Meningitis, spinal	1	2	3	2	1	3	2	5	1	1	1	4	15	12	1		28
Myelitis													1	1			2
Nervous prostration					4	1	1	1	3		3	4	5	12			17
Neuralgia													5	4			9
Neurasthenia	3	3	1	9	10	2		2	1	2	1	2	12	19	3	1	35
Paralysis	50	32	24	53	39	34	44	48	45	51	42	32	251	223	13	7	494
Spina bifida						1			1		3	1	4	3			7
Spine, disease of	1	1	2	1	1	1	1	2	1	2	3	2	12	5			17
Spinal sclerosis.				1	1		1	1	1			1	1				4
Tetanus	1	3	4		1		2	2	1	3	4	4	18	7			25
Total	190	117	112	204	169	140	174	143	133	215	190	150	1,004	835	49	49	1,937
ORDER TWO—CIRCULATORY.																	
Congestion	3	4	3	2	4	3	3	2	3	7	7	3	23	19	2		44
Heart disease	93	86	81	120	76	90	110	71	95	81	80	57	551	431	20	39	1,041
Hemorrhage	10	6	2	9	11	4	6	1	4	4	6	2	29	35	1		65
Total	106	96	86	131	91	97	119	74	103	92	93	62	603	485	23	39	1,150

ORDER THREE—RESPIRATORY.

Asthma	8	1	9	6	6	3	4	3	5	4	2	29	21	1	1	52
Bronchitis	17	21	27	21	21	16	15	4	9	7	15	85	82	6	7	180
Catarrh	1			2	7	2	4	1	3	3		13	15			28
Emphysema																3
Hemoptysis		2			1	7	1		2			4	1	1		5
Laryngitis	10	4	4	4	3				2	5	2	26	26			53
Lungs, abscess	1	1			2		1			2		3	5			8
Lungs, congestion	4	4	13	9	10	10	2	4	5	2	4	32	36	2		70
Lungs, disease	3	5	14	3	10	6	5	3	3	4	1	30	25	2		59
Pharyngitis	2	2							1		1	3	4			7
Pleuritis	1	1	3	1	2		2	2	1	2	3	50	8	2		19
Pneumonitis	65	93	152	152	194	143	62	34	41	22	21	502	487	32	32	1,053
Pneumonitis, broncho	4	4	2	4	1	1			1		1	7	10			17
Pneumonitis, catarrhal	1	1	2		1	2	1					6	4			10
Pneumonitis, pleuro				1	2	2		2				6	4			10
Pneumonitis, typho	2	3	2	1	2					2		7	7			14
Total	118	141	233	203	259	194	97	53	75	51	51	765	735	44	44	1,588

ORDER FOUR—DIGESTIVE.

*Bowels, catarrh	1															1
*Appendicitis																13
Bowels, congestion		3			1	4	3	2	1			9	4			35
Bowels, disease of	28	15	20	9	9	8	1	7	10	8	12	12	63	1	7	138
Bowels, hemorrhage		2		2	3	2	2			2	11	62	5	6		42
Bowels, obstruction	4	3	5	8	2	2	2	8	3	2	1	17	25			42
Bowels, ulceration	1	1								1		3	2			5
Colitis	6	3		2		3	1	3	12	2	3	19	15			35
Dyspepsia		2	3		1		3	2	1			8	8	1		17
Enteritis	30	14	10	5	2	7	8	10	38	31	25	83	89	6	10	189
Gall stones			6	1	2											7
Gastritis	12	8	11	8	12	7	6	10	7	13	17	64	54	1	3	122
Gastro enteritis	5	3	4	1	2	4	2	1	4	7	3	18	18	1		37
Hepatitis	4	3	6	3	1	4	1	1	2	1	1	10	13	2		25
Hernia	1	2	2	3	1	2	1		4	3	1	7	12			19
Intussusception		1		1	2	2	1			1		5	2			7
Jaundice	1				2	1	2	1	1		1	4	5			9
Liver, abscess	3	2				1	2	1		1	1	5	5			10
Liver, atrophy	1		1		1	2	3	6	3	8		16	4	1		6
Liver, cirrhosis					2	5	10	10	3			2	2			19
Liver, disease	10	5	6	1	9	5	4	3	13	7	43	35	37	3	3	83
Peritonitis	16	19	19	8	18	27	20	34	18	11	15	73	127	8	2	213
Stomach, catarrh	3	1		1	1	3	1		3	3	1	6				7
Stomach, congestion			2	3	1						2	12				27
Stomach, disease	7	5	2	5	3	10	6	10	4	3	2	28	27	1	1	57

TABLE B—Continued.

CLASS THREE—LOCAL DISEASES.	1895.			1896.									White.		Colored.		Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Male	Fem.	Male	Fem.	
ORDER FOUR—Continued.																	
Stomach, ulceration	2	...	2	1	1	1	4	...	2	1	1	4	8	5	1	...	14
Stomatitis . . . . .	...	...	...	2	1	1	2	...	3	...	...	...	6	8	...	...	14
Tonsillitis	4	3	2	1	5	4	2	...	...	...	...	2	14	11	...	...	28
Typhlitis . . . . .	...	...	...	...	1	...	...	1	...	...	...	1	1	2	...	...	3
Total	142	95	73	93	76	82	100	74	117	123	113	104	547	578	31	36	1,192
ORDER FIVE—URINARY.																	
Albuminuria . . . . .	...	...	3	...	1	...	2	2	2	9	5	5	21	8	...	...	29
Cystitis	4	4	...	3	4	...	2	4	2	3	5	2	29	2	...	...	31
Diabetes	7	4	4	4	5	1	4	4	2	3	5	3	20	17	...	...	47
Kidney disease	9	6	6	9	10	8	3	2	3	9	4	2	40	19	5	7	71
Nephritis	35	34	19	28	29	24	19	28	33	24	16	17	201	100	3	2	306
Prostatitis	2	1	1	...	...	2	...	...	...	...	...	...	5	...	...	...	5
Uræmia	6	6	5	7	7	6	7	7	6	4	5	6	36	31	3	2	72
Total	63	55	37	51	56	41	37	43	50	54	39	35	362	177	11	11	561
ORDER SIX—GENITIVE.																	
Tumor ovarian	1	1	2	...	...	...	3	...	...	...	...	...	...	7	...	...	7
Total	1	1	2	...	...	...	3	...	...	...	...	...	...	7	...	...	7
ORDER EIGHT—INTEGUMENTARY.																	
Abscess	2	1	...	7	4	5	3	2	2	1	3	2	19	13	...	...	32
Total	2	1	...	7	4	5	3	2	2	1	3	2	19	13	...	...	32
ORDER NINE—MISCELLANEOUS.																	
Tumor	3	2	1	4	6	2	3	4	2	2	4	1	14	20	...	...	34
Total	3	2	1	4	6	2	3	4	2	2	4	1	14	20	...	...	34

TABLE B—Continued.

CLASS FOUR—DEVELOPMENTAL.	1895.			1896.									White.		Colored.		Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Male.	Fem.	Male.	Fem.	
ORDER ONE—CHILDREN.																	
Birth premature	8	4	5	6	5	3	7	12	11	3	9	3	48	28	76	24	9
Cyanosis	1	2	2	4	6	4	2	2	1	1	1	2	16	7	24	9	9
Malformation	3	1	1	1	2	1	1	1	1	1	1	1	4	5	13	13	13
Malnutrition	3	1	1	1	3	2	1	1	2	1	1	1	5	8	13	13	13
Total	15	6	7	12	16	10	9	12	14	5	11	5	73	48	122	48	122
ORDER TWO—WOMEN.																	
Parturition	3	3	2	2	1	1	1	1	1	2	2	2	14	14	15	15	15
Postpartum hemorrhage	1	1	1	1	2	2	3	1	1	1	1	2	5	5	5	5	5
Puerperal eclampsia	4	4	1	1	1	1	1	1	2	1	3	2	24	24	25	25	25
Total	4	7	3	3	3	3	6	2	3	4	5	2	43	43	45	45	45
ORDER THREE—OLD AGE.																	
Old age	39	27	29	56	49	49	38	25	22	40	54	47	224	233	475	475	475
Total	39	27	29	56	49	49	38	25	22	40	54	47	224	233	475	475	475
ORDER FOUR—NUTRITION.																	
Asthenia	1	1	1	2	1	3	2	4	3	2	3	3	10	11	22	22	22
Debility	17	11	3	24	9	9	14	16	12	9	8	6	62	69	138	138	138
Exhaustion	8	8	3	18	12	11	10	9	4	11	13	9	61	55	116	116	116
Marasmus	24	4	5	5	4	11	2	1	2	10	10	4	43	36	82	82	82
Total	50	24	11	49	26	34	28	30	21	32	34	19	176	171	358	358	358

TABLE B—Continued.

CLASS FIVE—ACCIDENTS.	1895.			1896.									WHITE.		COLORED.		Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Male.	Fem.	Male.	Fem.	
ORDER ONE—ACCIDENTS.																	
Accidents	25	21	26	63	42	25	27	44	32	48	49	33	321	90	20	4	435
Accidents, railroad	10	6	11	2	9	3	6	4	8	5	4	6	67	7	..	..	74
Burning	4	3	1	1	4	3	3	3	1	1	1	1	19	6	..	..	25
Drowning . . . . .	..	..	..	4	4	..	3	7	10	12	11	7	43	5	5	..	53
Insolation . . . . .	..	..	..	..	..	..	..	..	..	4	4	6	13	4	..	..	17
Lightning . . . . .	..	..	..	..	..	..	..	..	..	..	2	..	2	1	..	..	3
Poison	2	3	1	2	..	2	2	1	1	..	5	..	14	6	..	..	20
Shooting	2	1	3	2	2	1	3	2	7	5	4	1	26	4	3	..	33
Total	43	34	43	74	61	34	44	61	60	80	77	49	492	136	28	4	660
ORDER THREE—HOMICIDE.																	
Homicide	1	1	1	3	..	..	..	1	..	2	..	..	6	3	..	..	9
Total	1	1	1	3	..	..	..	1	..	2	..	..	6	3	..	..	9
ORDER FOUR—SUICIDE.																	
Drowning . . . . .	..	..	..	..	1	..	1	..	..	..	..	..	1	1	..	..	2
Hanging	1	..	..	1	1	..	1	..	2	..	..	..	5	1	..	..	6
Poison . . . . .	..	..	1	..	1	1	..	..	1	1	2	1	5	3	..	..	8
Shooting . . . . .	..	..	1	..	1	1	1	..	1	..	..	..	4	..	..	..	4
Suicide	9	4	4	9	5	2	6	6	5	10	11	5	57	17	1	1	76
Total	10	4	6	10	9	4	9	6	8	11	13	6	72	22	1	1	96
UNKNOWN AND UNCLASSIFIED.																	
Unknown	85	57	30	31	23	15	30	16	34	41	47	34	263	177	1	2	443
Unclassified	20	20	23	11	4	11	37	39	40	43	38	49	143	161	19	12	335
Total	105	77	53	42	27	26	67	55	74	84	85	83	406	238	20	14	778

TABLE B—Continued.

RECAPITULATION.	1885.			1896.									WHITE.		COLORED.		Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July.	Aug	Sept.	Male.	Fem.	Male.	Fem.	
Zymotic diseases.	642	409	256	307	224	196	204	168	230	455	476	479	1,965	1,934	65	82	4,046
Constitutional	211	185	162	240	227	263	301	211	236	231	248	198	1,078	1,178	97	103	2,756
Local.	625	508	424	723	605	626	633	437	460	562	438	405	3,314	2,850	158	179	6,501
Developmental.	108	64	50	120	94	96	81	69	60	81	104	73	483	495	11	11	1,000
Violence.	54	39	50	87	70	38	53	68	68	93	90	55	570	161	29	5	765
Unknown	85	57	30	31	23	15	30	16	34	41	47	34	263	177	1	2	443
Unclassified	20	20	23	11	4	11	37	39	40	43	38	49	143	161	19	12	335
Grand total	1,745	1,282	995	1,559	1,217	1,248	1,339	1,008	1,128	1,506	1,496	1,293	7,816	7,226	380	394	15,846

Measles	12	20	1	1	1	13	12	1	1	5	83	160	60	83	34
Peritonitis, puerperal	14	14	1	1	1	19	1	1	1	12	1	1	1	1	14
Pertussis	30	30	1	1	1	18	30	1	1	26	5	8	4	1	49
Pyæmia	35	35	4	4	2	2	10	5	20	24	2	2	1	1	91
Septicæmia, puerperal	28	28	1	1	3	1	1	1	1	1	1	1	1	1	31
Small-pox	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	1,554	1,706	53	92	89	1,311	1,194	345	416	83	160	60	83	3,652	
ORDER TWO—ENTHETIC.															
Syphilis	6	9	1	2	1	6	6	2	2	2	2	2	2	18	
Total	6	9	1	2	1	6	6	2	2	2	2	2	2	18	
ORDER THREE—DIETETIC.															
Delirium tremens	2	137	1	10	16	200	142	1	3	1	1	5	4	2	
Inanition	19	137	4	1	1	3	1	6	5	1	1	1	1	364	
Intemperance	6	1	1	3	1	1	1	1	1	1	1	1	1	9	
Purpura	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Total	205	137	4	13	16	204	142	12	3	2	5	4	4	376	

TABLE C—Continued.

CLASS TWO CONSTITUTIONAL.	NATIONALITY.				SOCIAL RELATIONS.								Total.		
	AMERICAN.		FOREIGN.		NOT REPORTED.		SINGLE.		MARRIED.		Widower.	Widow.		NOT REPORTED.	
	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.					
ORDER ONE—DIATHETIC.															
Anæmia.	7	15	1	1			4	8	4	3		5			24
Cancer.	97	189	36	41			14	15	96	134		86	10	30	413
Dropsy.	72	69	19	7			23	13	52	35		29	10	12	194
Goitre.		3		1						4				2	6
Leucocythæmia.	1						2		15	13	3	7	2	2	27
Rheumatism.	16	26	4	2			4	11							57
Total.	193	302	60	52	34	55	47	47	167	189	51	127	22	46	696
ORDER TWO—TUBERCULAR.															
Hydrocephalus.	5	4					5	4							9
Meningitis, tubercular.	18	26				1	18	21	1	4				2	46
Phthisis.	712	938	77	47	58	94	438	477	335	479	59	108	15	45	1,956
Scrofula.	9	11				3	9	15	3	5					32
Tabes, mesenterica.	4	12	1				4	7		2		2	1	1	17
Total.	748	1,021	78	47	62	101	474	524	339	490	59	110	16	48	2,060

TABLE C—Continued.

CLASS THREE—LOCAL DISEASES.	NATIONALITY.				SOCIAL RELATIONS.						Total.				
	AMERICAN.		FOREIGN.		NOT REPORTED.		SINGLE.		MARRIED.			Widower.	Widow.	NOT REPORTED.	
	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.				Male.	Fem.
ORDER ONE—NERVOUS.															
Apoplexy	85	79	18	10	14	10	20	9	68	47	18	40	11	3	216
Brain abscess	2	2	2	2	1	2	2	2	8	16	5	1	3	1	4
Brain congestion	43	49	25	7	19	9	85	35	55	29	15	16	3	4	98
Brain disease	117	95	25	1	3	1	12	12	1	1	2	1	2	1	272
Brain fever	13	13	5	1	1	1	3	1	11	6	4	7	1	1	30
Brain softening	10	13	1	1	1	2	1	1	12	4	2	3	1	2	26
Cerebral hemorrhage	13	17	1	2	2	2	13	13	4	4	2	3	1	1	39
Cerebritis	19	15	1	1	1	4	99	65	2	2	2	1	1	4	179
Convulsions	91	70	1	3	10	4	6	6	5	3	1	1	2	2	24
Epilepsy	13	8	1	1	1	2	2	3	7	4	1	2	2	1	21
Insanity	10	9	1	1	1	1	1	1	5	1	1	1	1	1	8
Locomotor ataxia	4	1	1	2	1	1	1	1	9	1	6	9	8	10	319
Meningitis	157	139	4	1	6	10	130	111	25	20	1	1	2	2	32
Meningitis, cerebral	13	17	1	1	1	1	9	16	3	2	1	1	2	1	28
Meningitis, spinal	14	12	1	1	2	1	15	12	1	1	1	1	1	1	2
Myelitis	1	1	1	1	1	1	2	5	1	4	2	3	1	1	17
Nervous prostration	4	12	1	1	1	1	2	5	1	1	1	3	1	1	9
Neuralgia	5	4	1	1	1	1	5	2	1	2	2	3	1	1	35
Neurasthenia	14	18	1	2	1	1	3	9	11	8	1	1	3	1	494
Paralysis	195	182	31	24	38	24	40	36	148	85	53	90	23	19	494
Spina bifida	3	3	1	1	1	1	6	3	3	3	2	2	1	1	7
Spine, disease of	11	5	1	1	1	1	1	1	1	1	1	1	1	1	17
Spinal sclerosis	1	2	1	1	1	1	14	3	4	4	1	1	1	1	4
Tetanus	18	6	1	1	1	1	1	3	1	1	1	1	1	1	25
Total	857	762	91	53	105	69	502	410	376	248	112	180	63	46	1,937
ORDER TWO—CIRCULATORY.															
Congestion	20	15	3	1	2	3	12	9	10	8	2	1	1	1	44
Heart disease	417	371	84	56	70	43	140	86	317	178	84	119	30	87	1,041
Hemorrhage	27	32	2	2	1	1	6	16	18	13	4	5	2	1	65
Total	464	418	89	59	73	47	158	111	345	199	90	125	33	89	1,150

Hepatitis	10	9	1	2	1	4	3	1	282	248	222	231	52	104	21	32	1,102
Hernia	3	9	4	2	1	1	1	4	61	55	56	66	66	497	457		
Intussusception	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25
Jaundice	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19
Liver, abscess	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7
Liver, atrophy	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Liver, cirrhosis	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
Liver, disease	11	23	3	9	3	3	6	6	6	6	9	12	9	12	1	1	6
Liver, disease	29	117	12	7	4	4	4	4	4	4	4	31	36	13	3	8	19
Peritonitis	65	117	12	7	4	4	4	4	4	4	4	70	70	13	3	8	213
Stomach, catarrh	5	14	2	2	1	1	1	1	1	1	1	4	4	3	1	1	7
Stomach, congestion	9	14	2	2	1	1	1	1	1	1	1	4	4	3	1	1	1
Stomach, disease	26	19	2	4	1	1	1	1	1	1	1	13	13	7	2	2	27
Stomach, ulceration	4	4	4	1	1	1	1	1	1	1	1	4	4	7	2	1	57
Stomach, ulcer	5	8	1	1	1	1	1	1	1	1	1	4	4	7	2	1	14
Tonsillitis	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
Typhlitis	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25
Total	457	497	66	56	55	61	282	248	222	231	52	104	21	32	1,102		3
ORDER FIVE—URINARY.																	
Albuminuria	18	7	2	2	1	1	5	2	10	3	5	3	1	3	1	1	24
Cystitis	25	2	4	4	1	1	3	1	17	10	9	16	1	1	2	1	31
Diabetes	23	16	4	3	2	1	6	5	16	10	6	1	1	1	1	1	47
Kidney disease	38	22	5	3	2	1	15	9	20	11	4	4	6	4	6	2	71
Nephritis	162	74	31	17	11	11	43	25	121	46	34	25	6	25	6	6	306
Prostatitis	4	30	1	2	1	1	5	5	2	21	8	5	2	5	2	2	5
Uremia	34	30	5	2	1	1	5	5	24	21	8	5	2	5	2	2	72
Total	304	151	52	22	17	15	77	47	210	91	69	39	17	39	11	11	561
ORDER SIX—GENITIVE.																	
Tumor, ovarian	7	7	1	1	1	1	1	1	1	5	5	5	1	5	1	1	7
Total	7	7	1	1	1	1	1	1	1	5	5	5	1	5	1	1	7
ORDER EIGHT—INTEGUMENTARY.																	
Abscess	15	11	1	1	3	2	7	7	8	4	4	2	2	2	2	2	32
Total	15	11	1	1	3	2	7	7	8	4	4	2	2	2	2	2	32
ORDER NINE—MISCELLANEOUS.																	
Tumor	13	16	1	3	1	1	1	2	12	11	2	6	1	6	1	1	34
Total	13	16	1	3	1	1	1	2	12	11	2	6	1	6	1	1	34

TABLE C—Continued.

CLASS FOUR— DEVELOPMENTAL.	NATIONALITY.				SOCIAL RELATIONS.								Total.		
	AMERICAN.		FOREIGN.		NOT REPORTED.		SINGLE.		MARRIED.		Widowers.	Widow.		NOT REPORTED.	
	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.				Male.	Fem.
ORDER ONE—CHILDREN.															
Birth, premature	44	27	..	..	4	1	48	28	..	..	..	..	..	..	76
Cyanosis	17	6	..	..	1	3	17	7	..	..	..	..	..	..	24
Malformation	3	2	..	..	1	1	4	5	..	..	..	..	..	..	9
Malnutrition	5	7	..	..	..	..	5	7	..	..	..	..	..	1	13
Total	69	42	..	..	5	6	74	47	..	..	..	..	..	1	122
ORDER TWO—WOMEN.															
Parturition . . . . .	..	12	..	1	..	2	..	1	..	12	..	..	..	2	15
Postpartum hemorrhage . . . . .	..	4	..	..	..	1	..	1	..	4	..	..	..	..	6
Periperal eclampsia . . . . .	..	23	..	..	..	2	..	1	..	24	..	..	..	..	25
Total . . . . .	..	39	..	1	..	5	..	3	..	40	..	..	..	2	45
ORDER THREE—OLD AGE.															
Old age	139	158	66	64	34	14	10	13	91	41	119	160	19	22	475
Total	139	158	66	64	34	14	10	13	91	41	119	160	19	22	475
ORDER FOUR—NUTRITION.															
Asthenia	11	10	..	1	..	..	6	5	3	2	1	3	1	1	22
Debility	41	49	17	12	..	13	5	2	27	14	24	49	8	9	138
Exhaustion	44	45	5	3	12	7	33	18	17	15	4	14	7	8	116
Marasmus	41	33	2	4	1	1	27	20	9	9	2	5	6	4	82
Total	137	137	24	20	19	21	71	45	56	40	31	71	22	22	358

TABLE C—Continued.

CLASS FIVE—ACCIDENTS.	NATIONALITY.				SOCIAL RELATIONS.								Total.		
	AMERICAN.		FOREIGN.		NOT REPORTED.		SINGLE.		MARRIED.		Widower.	Widow.		NOT REPORTED.	
	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.					
ORDER ONE—ACCIDENTS.															
Accidents	236	38	39	5	66	31	155	31	130	20	13	14	43	29	435
Accidents, railroad	47	5	5	1	15	1	25	3	21	2	7	2	14	..	74
Burning	6	16	..	1	..	2	5	9	1	7	2	..	..	1	25
Drowning	41	3	2	1	5	1	37	..	5	3	1	2	6	..	53
Insolation	6	3	9	..	1	1	6	2	1	1	1	1	..	..	17
Lightning	1	1	1	..	..	..	1	..	1	1	..	..	..	..	3
Poison	11	5	2	1	1	..	7	2	6	3	..	1	1	..	20
Shooting	26	4	2	..	1	..	15	1	9	2	3	..	2	1	33
Total	374	95	57	9	89	36	251	48	179	39	26	20	66	31	660
ORDER THREE—HOMICIDE.															
Homicide	6	3	..	..	..	..	2	1	4	1	..	1	..	..	9
Total	6	3	..	..	..	..	2	1	4	1	..	1	..	..	9
ORDER FOUR—SUICIDE.															
Drowning . . . . .	..	1	1	..	..	..	..	..	1	..	..	..	..	1	2
Hanging	5	1	..	..	..	..	2	..	2	1	1	..	..	..	6
Poison	4	2	..	..	1	1	1	2	4	1	..	..	..	..	8
Shooting	2	..	2	..	..	..	1	..	..	..	3	..	..	..	4
Suicide	40	16	9	..	9	2	17	8	30	6	8	2	3	2	76
Total	51	20	12	..	10	3	21	10	37	8	12	2	3	3	96

TABLE C—Continued.

CLASS FIVE—ACCIDENTS.	NATIONALITY.				SOCIAL RELATIONS.								Total.		
	AMERICAN.		FOREIGN.		NOT REPORTED.		SINGLE.		MARRIED.		Widower.	Widow.		NOT REPORTED.	
	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.	Male.	Fem.					
UNKNOWN AND UNCLASSIFIED.															
Unknown	240	173	8	4	16	2	181	116	44	31	6	12	30	20	443
Unclassified	85	111	25	16	52	46	61	60	55	54	12	25	34	34	335
Total	325	284	33	20	68	48	245	176	99	85	18	37	64	54	778

TAB

Causes of Deaths and Grouped Ages,

CLASS ONE—ZYMOTIC.	Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—MIASMATIC.														
Anthrax			2	1	1	3		2						
Chill, congestive					1							1		
Cholera infantum	171	146	71	60	11	25								
Cholera morbus	4		1										2	
Croup	19	10	58	54	27	22	1	2	1			1		
Diarrhoea	8	2	1	1	2				1		2	1		1
Diphtheria	21	9	164	145	112	126	29	36	9	9	4	2		2
Dysentery	14	19	37	28	4	8		3	5	4	2	5		4
Enterocolitis	25	33	21	28		2			1	1				
Erysipelas	12	8	1	1		1			1	1	3	1	1	2
Fever, catarrhal	2	3	1	1					1	1				
Fever, cerebro spinal			1	2	1	3		1			1	1		1
Fever, congestive											1			
Fever, malarial	9	6	5	5	2	2	3	2	2	5	3	6	2	6
Fever, puerperal										6		15		12
Fever, remittent	2	2	4	2	1	2	1	1		1	1			
Fever, scarlet	6	3	25	26	12	11	4	3			1	2		1
Fever, typhoid	7	3	32	23	16	43	31	52	64	87	142	102	68	77
Fever, typho malarial	1				1	2		1	2	2	3	3	2	3
Gangrene	2				1			1						
La grippe	8	5	4	5	1			2	2	2	3	8	5	5
Measles	5	3	5	6		2	3					2	1	4
Peritonitis, puerperal												8		5
Pertusis	11	15	7	14		1			1					
Pyæmia	6		3	1	3	5					4	9	1	15
Septicæmia, puerperal										3		14		8
Small-pox														
Total	333	267	443	403	195	258	72	106	88	125	170	181	82	146
ORDER TWO—ENTHETIC.														
Syphilis	2	1								2	1	2	2	1
Total	2	1								2	1	2	2	1
ORDER THREE—DIETIC.														
Delirium tremens	190	119	3	2	2	1					2	1	1	
Inanition													1	
Intemperance					1								2	
Purpura														
Total	190	119	3	2	3	1					2	1	4	

LE D.

Year Ending September 30, 1896.

40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Reported.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
1	1	2	2	3				1						2	1	12	2	2
1		1	2	1	1		1	1						2	4	255	235	21
														3	1	14	6	20
4		5	2	8	5	13	2	4	3					1	2	107	92	199
4	3	1	6	12	5	18	14	5	7	1				2	1	49	18	67
4		5	1	1	1		1	1	3	3	1			30	17	359	358	717
4	2	1	2	2	2	1	2	5	1	4				6	4	112	110	222
						4			3	1				2	2	50	73	123
1																32	31	63
1															4	3	14	17
2	9	6	1	8	6	4	1	8	1	1						4	3	8
1	2				2	1								2	3	3	3	6
						2	1		1						1	49	60	109
															2		36	36
47	28	27	37	22	16	14	9	2								12	12	24
1	5	2			1	1								2		50	46	96
3	11	5	7	11	11	20	29	4	3		1			22	9	494	486	980
	1		1		1											13	17	30
																16	9	25
														5	4	73	101	174
																14	20	34
																19	30	49
9	5	5	2	10	1	2	1	1	2					3	2	47	44	91
	2	2													2		31	31
79	70	61	70	81	56	83	74	29	36	1	2			82	59	1,787	1,865	3,652
2		1		1	2										1	8	10	18
2		1		1	2										1	8	10	18
1	1	1	2	1	2	4	2		2					5	22	2	154	2
4		3														9		364
																1		9
6	1	4	2	1	2	4	2		2					5	22	222	154	376

TABLE D—

CLASS TWO—CONSTITUTIONAL.	Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—DIATHETIC.														
Anemia	1	2	1	3	..	..	1	1	1	1	..	2	..	3
Cancer	1	1	..	..	..	..	1	1	1	..	4	7	4	24
Dropsy	3	1	3	1	1	3	4	2	..	1	6	7	4	5
Goitre . . . . .	..	..	..	..	..	..	..	..	..	..	..	2	..	..
Leucocythæmia . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Rheumatism . . . . .	..	..	1	1	1	2	1	2	2	1	1	7	2	4
Total	5	4	5	5	2	5	7	5	4	3	11	25	11	36
ORDER TWO—TUBERCULAR.														
Hydrocephalus	2	3	3	1	..	..	..	..	..	..	..	..	..	..
Meningitis, tubercular	8	9	4	6	3	2	1	..	..	2	2	3	..	3
Phthisis	15	15	16	25	10	11	14	41	56	87	190	291	142	226
Scrofula	4	2	1	4	..	..	..	..	..	1	1	3	..	3
Tabes mesenterica	1	..	1	5	2	..	..	..	..	1	1	1	..	1
Total	30	29	25	41	15	13	15	41	56	91	194	298	142	233

Continued.

40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Reported.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
1	1	1		1	2	1			1							8	16	24
13	39	25	61	43	56	29	29	8	11					19	37	148	265	413
7	12	16	19	22	16	22	13	7	4			1		10	4	105	89	194
..	1	..	1	..	..	..	..	..	..					..	2	..	6	6
..	..	..	..	..	..	..	..	..	..					..	..	2	..	2
3	1	4	7	5	4	3	1	1	1					..	2	24	33	57
24	54	46	88	71	78	56	43	16	17	..	1	..	..	29	45	287	409	696
..	..	..	..	..	..	..	..	..	..					..	..	5	4	9
112	212	79	63	159	33	37	32	3	2	..	..	..	..	1	2	19	27	46
..	..	1	1	3	1	..	..	..	..				5	14	61	347	1,109	1,956
..	..	..	1	..	2	..	..	..	..				..	2	5	12	20	32
112	212	80	70	162	36	37	32	3	2	..	..	..	5	17	69	888	1,172	2,060

TABLE D—

CLASS THREE—LOCAL DISEASES.	Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—NERVOUS.														
Apoplexy	1			1	1		1	1	1	6	5	6	6	
Brain abscess			1	1	1					1				
Brain congestion	19	19	5	7	2	7	1	1	2	4		6	8	
Brain disease	27	24	18	19	5	1	4	4	5	9	4	21	7	
Brain fever	5	4	5	3	2	2	1	2	1	1	1		1	
Brain softening								1					2	
Cerebral hemorrhage	1							1	2		1	3		
Cerebritis	8	2	2	8	2	1	1		1	2	2		1	
Convulsions	75	48	18	17	2	2	2				2	2	2	
Epilepsy							1	2	1	4		3	4	
Insanity							1				3	1	2	
Locomotor ataxia												1		
Meningitis	50	47	50	42	11	11	7	12	4	6	7	7	5	
Meningitis, cerebral	7	4	3	6	1	4	2	2					1	
Meningitis, spinal	4	2	2	3	5	2	2	1		3				
Myelitis								1						
Nervous prostration		1									3	1	1	
Neuralgia		2	1					1			1		3	
Neurasthenia	2	3			1	1			1		1		3	
Paralysis	5	6	6	5	4	4		4	3	2	6	4	13	13
Spina bifida	3	3						1						
Spine, disease of		2	2	1	2			1		2		1		
Spinal sclerosis									1		1			
Tetanus	6	3					5		2	1	2			
Total	213	170	113	112	36	40	22	33	24	21	47	36	63	59
ORDER TWO—CIRCULATORY.														
Congestion	5	6	2		1	2			2				2	4
Heart disease	30	20	12	9	12	4	7	4	11	14	18	36	37	31
Hemorrhage	2	9		1		1				1	2	4	3	7
Total	37	35	14	10	13	7	7	4	13	15	20	40	42	42
ORDER THREE—RESPIRATORY.														
Asthma			1			1				1			1	
Bronchitis	27	23	21	13	4	5	3	2		2		1	1	
Catarrh		3	1		1	1				1		1	1	
Emphysema											1			
Hæmoptysis											1			
Laryngitis	4	3	9	8	10	4	1				2	2	1	
Lungs, abscess	7						1			1	1	1		
Lungs, congestion	7	6	2	3		3		1		4	1	4	3	
Lung disease	6	5	2	3			2			4	5	3	2	5
Pharyngitis		1	1			2		1			1			
Pleuritis		1						1						
Pneumonitis	45	45	41	53	8	14	8	6	18	15	27	31	31	13
Pneumonitis, broncho	1		2	1	1	1				1				
Pneumonitis, catarrhal	2	2	2								2			
Pneumonitis, pleuro	1	1		1				1				1		
Pneumonitis, typho		1	2						3	1	1	3		
Total	94	96	84	83	24	31	14	13	18	25	45	46	47	27

Continued.

40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Reported.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
6	5	20	19	21	20	33	27	22	8	1					4	117	99	216
2	4	1		1	2	3								2	2	46	52	4
13	13	23	12	12	11	14	8	4		3				7		161	111	98
3		1	3	6	2	3	4	2	3							16	14	272
2		3		1	4	3	4	2	1					1		16	15	30
1			2	1		1	2	1						2	1	16	10	31
2	2	2		1	1	1	1							2	4	20	19	26
1	1	2	2	2	1	2	1	1						2		102	77	39
6	9	6	1	3	4	6	4	3	2					1		14	10	179
2				1										1		12	9	24
				1										1		7	1	21
				1										9		169	150	8
				1											1	14	18	319
				1											1	16	12	32
				2	1	2	3	2							1	1	1	28
				1	2	3	2								1	5	12	2
2	3	5	4	1	1	4		2		1						5	4	17
18	14	38	44	54	50	79	62	23	15	2				13	7	15	10	9
2						1	2	1								264	230	35
1	1			2	1											4	3	494
																12	5	7
																1	3	17
																18	7	4
61	52	106	89	109	100	155	117	59	31	2	5			41	21	1,053	884	25
3	2	2	2	4	1	1		1						2	2	25	19	44
56	56	84	71	127	83	123	93	25	21			2		27	28	571	470	1,041
2	5	4	2	6	4	6	1	1						4		30	35	65
61	63	90	75	137	88	130	94	27	21			2		33	30	626	524	1,150
1		5	6	8	7	9	6	2	1					3		30	22	52
3	2	5	4	8	9	8	7	8	5	1	1			1	5	91	89	180
	2	2	1	2	2	3	4							2		13	15	28
		1		1												3		3
		1				1		1	1							4	1	5
	2	1			2											27	26	53
	2	1			1											3	5	8
1	2	3	1	2	3	8	5		3							34	36	70
2	3	2	3	5	3	4	3	2	1					3	1	32	27	59
		1														3	4	7
1		2	1	1	4	4									1	9	10	19
34	29	33	26	31	21	20	33	6	15	1				231	218	534	519	1,053
		1		3	1	3		1	1		1					7	10	17
				2	1	1										6	4	10
1	1															6	4	10
																7	7	14
43	43	58	43	61	54	58	59	21	27	2	3			240	229	809	779	1,588

Continued.

40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Reported.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	9	4	13
1	2	1	2	4	1	2	2	1	..	..	..	..	..	2	2	1	..	1
9	9	7	3	8	2	4	4	1	..	..	..	..	..	13	13	68	22	35
1	1	2	1	1	5	1	2	1	..	..	..	..	..	1	7	70	5	138
1	1	1	4	..	..	..	..	1	..	..	..	..	..	..	3	26	2	12
1	1	2	..	..	..	..	..	1	..	..	..	..	..	..	17	43	5	43
1	1	1	1	1	1	1	1	1	1	..	..	..	..	..	9	2	2	5
4	3	7	2	8	8	2	10	3	2	..	..	..	..	2	19	16	8	35
2	5	2	6	2	9	13	9	4	3	..	..	..	..	1	9	99	4	17
2	3	2	1	16	13	3	2	1	3	..	..	..	..	4	90	99	189	7
2	2	2	2	1	1	3	1	1	1	..	..	..	..	6	3	65	57	132
1	2	1	3	3	3	3	1	1	1	..	..	..	..	1	19	18	37	25
1	1	1	1	1	1	1	1	1	1	..	..	..	..	1	12	13	12	19
2	1	1	1	1	1	1	1	1	1	..	..	..	..	..	5	2	2	7
2	1	1	1	1	1	1	1	1	1	..	..	..	..	..	4	5	5	9
3	1	1	2	1	1	1	1	1	1	..	..	..	..	1	1	2	2	10
12	5	12	8	12	8	7	5	4	1	..	..	..	..	3	1	17	4	6
8	15	6	8	4	7	3	3	3	1	..	..	..	..	..	..	45	38	83
1	..	..	..	3	1	2	2	2	1	..	..	..	..	2	3	81	132	213
2	1	1	2	1	1	3	3	3	2	..	..	..	..	1	1	6	1	7
1	1	1	1	1	1	1	1	1	1	..	..	..	..	2	2	12	15	27
1	1	1	1	1	1	1	1	1	1	..	..	..	..	2	2	29	28	57
1	1	1	1	1	1	1	1	1	1	..	..	..	..	1	1	9	5	14
51	63	52	56	68	68	51	44	19	15	..	..	..	..	24	36	578	614	1,192
..
1	1	5	5	3	2	2	2	..	1	..	..	..	..	3	1	21	8	29
4	2	2	7	12	4	13	4	..	2	..	..	..	..	..	..	29	2	31
24	6	8	3	1	8	8	8	1	1	..	..	..	..	..	..	30	17	47
1	12	41	10	47	22	38	13	2	2	..	..	..	..	1	8	45	26	71
4	3	8	2	6	2	2	..	1	1	..	..	..	..	2	5	204	102	306
34	24	69	18	79	31	76	20	25	5	3	..	..	..	6	6	39	33	72
..	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	7	7
..	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	7	7
3	1	1	3	..	2	1	..	2	..	..	..	..	..	1	..	19	13	32
3	1	1	3	..	2	1	..	2	..	..	..	..	..	1	..	19	13	32
1	3	3	6	3	3	3	3	2	..	..	..	..	..	..	..	14	20	34
1	3	3	6	3	3	3	3	2	..	..	..	..	..	..	..	14	20	34

TABLE D—

CLASS FOUR—DEVELOP- MENTAL.	Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—CHILDREN.														
Birth, premature	48	28	..	..	..	..	..	..	..	..	..	..	..	..
Cyanosis	16	7	1	..	..	..	..	..	..	..	..	..	..	..
Malformation	2	5	2	..	..	..	..	..	..	..	..	..	..	..
Malnutrition	5	6	..	1	..	..	..	..	..	..	..	..	..	..
Total	71	46	3	1	..	..	..	..	..	..	..	..	..	..
ORDER TWO—WOMEN.														
Parturition . . . . .	..	..	..	..	..	..	..	..	1	..	8	..	4	..
Postpartum hemorrhage . . . . .	..	..	..	..	..	..	..	..	..	2	..	..	1	..
Puerperal eclampsia . . . . .	..	..	..	..	..	..	..	..	7	..	8	..	8	..
Total . . . . .	..	..	..	..	..	..	..	..	8	..	18	..	13	..
ORDER THREE—OLD AGE.														
Old age . . . . .	..	..	..	..	..	..	2	..	2	..	..	2	..	..
Total . . . . .	..	..	..	..	..	..	2	..	2	..	..	2	..	..
ORDER FOUR.														
Asthenia	7	3	..	1	..	..	..	..	1	..	..	..	..	1
Debility	1	1	..	..	..	..	..	..	1	..	..	..	..	..
Exhaustion	25	18	5	1	..	..	1	..	2	2	1	5	5	4
Marasmus	16	17	12	4	1	1	..	..	1	1	2	1	1	..
Total	49	39	17	6	1	1	1	..	4	3	3	6	6	5

Continued.

40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Reported.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48	28	76
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	7	24
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	5	9
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	8	13
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	74	48	122
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	15	15
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	5	5
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	25	25
..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	45	45
1	1	..	2	13	12	65	83	115	114	24	18	2	..	15	4	239	236	475
1	1	..	2	13	12	65	83	115	114	24	18	2	..	15	4	239	236	475
..	..	..	..	1	..	1	5	2	..	..	..	..	..	..	2	11	11	22
..	1	3	1	7	7	27	28	20	31	3	2	..	..	2	2	64	74	138
2	2	4	5	8	3	5	5	2	4	..	2	..	..	1	4	61	55	116
..	2	3	1	3	2	5	6	..	2	..	..	..	..	..	1	45	37	82
2	5	10	7	19	12	38	44	24	37	3	4	..	..	3	9	181	177	358

TABLE D—

CLASS FIVE—ACCIDENTS.	Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—ACCIDENTS.																
Accidents	11	9	22	6	15	6	20	4	31	6	59	7	50	8		
Accidents, railroad					2	3	2	6			15	3	10			
Burning		1	3	5		2				1	2	2		2		
Drowning	1		1		5	12		15			7		3	2		
Insolation						1					1			1		
Lightning											1			1		
Poison			3						1		1	2	4			
Shooting					1		4		3		7	2	6	1		
Total	12	10	29	11	23	9	39	6	55	8	93	16	75	15		
ORDER THREE—HOMICIDE.																
Homicide										1	2	1	3			
Total										1	2	1	3			
ORDER FOUR—SUICIDE.																
Drowning														3		
Hanging														3		
Poison										2	2	1	3			
Shooting									1	3			1			
Suicide								1	3	5	12	9	6			
Total								1	4	7	14	10	13			
UNKNOWN AND UNCLASSIFIED.																
Unknown	48	28	14	13	2	6	8		2	1	7	6	8	4		
Unclassified	22	22	8	9	1	1	4	3	3	6	6	21	17	16		
Total	70	50	22	22	3	7	12	3	5	7	13	27	25	20		

Continued.

40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Reported.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
38 10 1 2 1 2 5	7	25 6 . 2 . . .	7 2 3 . 1 . .	19 2 . 1 . . .	7 . 1 1 . . .	13 2 . 1 2 . .	5 . 2	6 1	4 . 1	3 . . . . . .	. . . . . .	1 . . . . . .	. . . . . .	32 6 . 1 . 5 . 2	18 . 1 . 1 . . .	341 67 6 48 13 2 14 29	94 7 19 5 4 1 6 4	435 74 25 53 17 3 20 33
59	9	34	13	25	10	18	8	8	5	3	..	1	.	46	20	520	140	660
..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	6	3	9
..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	6	3	9
1 1 . . 9	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	1 5 5 4 58	1 1 3 . 18	2 6 8 4 76
11	2	15	..	7	1	6	1	1	..	..	..	..	..	2	1	73	23	96
8 6	9 21	8 20	9 12	23 21	15 11	21 16	4 8	1 2	1 2	..	..	..	..	115 36	82 41	264 162	179 173	443 335
14	30	28	21	44	26	37	12	3	3	..	..	..	..	151	123	426	352	778

TABLE D—

	Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
RECAPITULATION.														
Zymotic diseases	525	387	446	405	198	259	72	106	88	127	173	184	88	147
Constitutional	35	33	30	46	17	18	22	46	60	94	205	323	153	269
Local	464	389	280	268	98	107	64	84	90	103	178	203	223	213
Developmental	120	85	20	7	1	1	3		4	13	3	24	8	18
Violence	12	10	29	11	23	9	39	7	59	16	109	27	91	15
Unknown	48	28	14	13	2	6	8		2	1	7	6	8	4
Unclassified	22	22	8	9	1	1	4	3	3	6	6	21	17	16
Grand total	1,226	954	827	759	340	401	212	246	306	360	681	788	588	682

Continued.

40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Reported.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
87	71	66	72	83	60	87	76	29	38	1	2	.	.	87	82	2,017	2,029	4,046
136	266	126	158	233	114	93	75	19	19	.	1	.	5	46	114	1,175	1,581	2,756
254	251	379	291	457	347	474	337	155	99	7	8	2	.	345	331	3,472	3,029	6,501
3	9	10	9	32	24	103	127	139	151	27	22	2	.	18	17	494	506	1,000
70	11	49	13	33	12	24	9	9	5	3	.	1	.	48	21	599	166	765
8	9	8	9	23	15	21	4	1	1	.	.	.	.	115	82	264	179	443
6	21	20	12	21	11	16	8	2	2	.	.	.	.	36	41	162	173	335
564	638	658	564	882	583	818	636	354	315	38	33	5	5	695	688	8,183	7,663	15,846

LIST OF PHYSICIANS.

ABBREVIATIONS—R., for regular; E., for eclectic; H., for homeopathic; P. M., for physio-medical; N. R., for not reported. "Basis of License:"—D., for diploma; figures 3 and 10 for number of years' practice.

This list is furnished by County Health Officers, and any mistakes that occur in spelling of names, or omissions, are attributable to them.

The names of County Health Officers are printed in capitals.

Adams County.

Names.	Postoffice.	School.	Names.	Postoffice.	School.
Aspy, H. M.	Geneva.	R. 3	Holloway, Mrs. M. D.	Decatur	R. D
Andrews, O. P. M.	Monroe.	R. D	Hickman, J. L.	Decatur	P.-M. D
Brayton, Wm.	Geneva.	R. D	Holloway, A. G.	Decatur	R. 3
Beavers, Seth D.	Decatur	R. D	Harper, J. L.	Pleasant Mills	R. 10
Black, Wm. C.	Geneva.	R. D	Houghton, Asa.	Linn Grove	R. 10
Boyers, J. S.	Decatur	R. D	Keller, H. E.	Decatur	P.-M. D
Clark, C. S.	Decatur	E. D	Kohn, Ernst	Preble	R. D
Clark, D. D.	Decatur	R. D	McMillen, W. W. P.	Decatur	R. D
Calderwood, Geo.	Monroe	R. 3	McDowell, Jacob.	Geneva	R. 10
COSTELLO, H. F.	Decatur	R. D	Stonebumer, J. W.	Berne	E. D
Coverdale, J. S.	Decatur	R. D	Thomas, P. B.	Decatur	R. D
Erwin, D. J.	Decatur	R. D	Ward, J. B.	Geneva	R. D
Ford, A. C.	Geneva.	R. 3	Mattox, L.	Geneva	R. D
Franz, Ernest	Berne	H. D	Vizard, J. W.	Pleasant Mills	E. D

Regular, 22; Eclectic, 3; Homeopathic, 1; Physio-Medical, 2. Total, 28.

Allen County.

Adams, Horace	Harlan	R. 10	Harrod, Morse	Ft. Wayne	R. D
Barnett, W. W.	Ft. Wayne	R. D	Jones, J. H.	Ft. Wayne	N. R. 10
Bergk, K. Carl.	Ft. Wayne	—	Kesler, R.	Ft. Wayne	R. D
Boswell, A. J.	Ft. Wayne	R. D	Kryder, John S.	Cedarville	R. D
Bower, G. B. M.	Ft. Wayne	R. D	Lipes, R. F.	Ft. Wayne	R. D
Bowen, G. W.	Ft. Wayne	H. D	Leonard, P. M.	Ft. Wayne	H. D
Bulson, A. E. Jr.	Ft. Wayne	R. D	Lipes, A. G.	Ft. Wayne	R. D
Brudi, A. C.	New Haven	R. D	Mentzer, Simeon E.	Monroeville	R. D
Ball, Emma W.	Ft. Wayne	R. —	Martz, Christian	Ft. Wayne	H. D
Chambers, J. D.	Ft. Wayne	R. D	Miller, J. E.	Ft. Wayne	R. D
Coblentz, J. W.	Ft. Wayne	R. 10	Myers, Isaac N.	Maples	R. D
Carter, Wm. J.	Ft. Wayne	R. D	Myers, Hershah S.	Maples	R. D
Cutshall, Geo. W.	Areola	R. D	Myers, Wm. H.	Ft. Wayne	R. D
Conelly, W. A.	Monroeville	R. D	Miller, Geo. W.	Ft. Wayne	R. —
Cook, Wm. Backus.	Ft. Wayne	E. —	Murphy, Geo.	Leo.	R. D
Deppler, R. R.	Ft. Wayne	E. —	McComb, Wm. S.	Leo.	R. D
Dills, Thos. J.	Ft. Wayne	R. D	McCaskey, G. W.	Ft. Wayne	R. D
Dinnen, Jas. M.	Ft. Wayne	R. D	McCusland, J. W.	Ft. Wayne	R. D
Duemling, H. A.	Ft. Wayne	R. D	McCormick, T. H.	Ft. Wayne	R. —
Enslen, W.	Ft. Wayne	R. D	McOscar, E. J.	Ft. Wayne	R. D
Engle, A.	Monroeville	R. D	McHugh, J. E.	Ft. Wayne	R. D
Ferguson, W. G.	Ft. Wayne	R. D	McGoogan, Geo. B.	Ft. Wayne	R. —
Ferguson, W. T.	Ft. Wayne	R. D	Nieswonger, H. W.	Ft. Wayne	R. 3
Fricke, Richard	Ft. Wayne	R. —	Nieschang, C. C. T.	Ft. Wayne	R. D
Gard, Brookfield	Ft. Wayne	R. D	Niessmann, H. G.	Ft. Wayne	R. D
Gilbert, Chas. J.	New Haven	R. D	Null, Lycurgus	New Haven	R. D
Green, Francis M.	Ft. Wayne	E. D	Omo, Joseph J.	Harlan	R. D
Greenawalt, G. L.	Ft. Wayne	R. D	Porter, Miles T.	Ft. Wayne	R. D
Greenwell. —	Huntertown	R. D	PROEGLER, CARL	Ft. Wayne	R. D
Gunther, J. W.	Harlan	R. 10	Phillips, S. P.	Ft. Wayne	N. R. D
Harris, Ella	Ft. Wayne	H. D	Rauch, A. J.	Ft. Wayne	R. —
Harris, L. P.	Ft. Wayne	H. D	Rosenthal, I. N.	Ft. Wayne	R. D
Hetrick, Jacob	Ft. Wayne	R. D	Rosenthal, Maurice I.	Ft. Wayne	R. D
Heaton, C. E.	Ft. Wayne	R. D	Ross, George	Ft. Wayne	H. D

Allen County—Continued.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Ruhl, Wm. De La	Ft. Wayne	R. D	Stultz, C. E	Ft. Wayne	R. D
Schrader, Frank W	Ft. Wayne	R. —	Sturgis, Lewis T	Ft. Wayne	R. D
Stewart, Clarence E	Ft. Wayne	R. —	Stutz, John A	Ft. Wayne	H. D
Schilling, Carl	Ft. Wayne	R. D	Sweringen, B	Ft. Wayne	R. —
Schilling, John	Ft. Wayne	R. D	Schutt, John M	Harlan	N. R. D
Siver, E. L	Ft. Wayne	R. D	Swift, C. F	Harlan	R. D
Snow, Wm. D	Ft. Wayne	N. R. 10	Sledd, Sam'l D	Nine Mile	R. D
Smith, Joseph B	Hoagland	E. D	Tinkham, Melwin	Ft. Wayne	R. D
Stemen, C. B	Ft. Wayne	R. D	Wheelock, Kent K	Ft. Wayne	R. D
Stemen, G. C	Ft. Wayne	R. D	Whery, Wm. P	Ft. Wayne	R. D
Stemen, G. B	Ft. Wayne	R. D	Whery, Mary A	Ft. Wayne	R. D
Steman, Wm. E	Ft. Wayne	R. D	Young, John M	Ft. Wayne	R. D
Steman, Harietta	Ft. Wayne	R. D	Vanbuskirk, A. E	Ft. Wayne	R. D

Regular, 77; Homeopathic, 7; Eclectic, 4; not reported, 5; Total, 93.

Bartholomew County.

Arwine, J. S	Columbus	R. 10	Kent, C. V	Hope	R. D
Allen, W. H	Waymansville	R. 10	Kirkpatrick, A. M	Columbus	R. D
Banker, A. J	Columbus	R. D	Lawrence, W. H	Jonesville	E. 3
Butler, W. H	Columbus	R. D	Leonard, J. H.	South Bethany	R. D
Barrett, S. J	Hartsville	R. D	McLeod, A. J.	Columbus	R. D
Banker, W. T.	Columbus	R. D	McCoy, Geo. T	Columbus	R. D
Banks, W. H.	Waymansville	R. 10	Morrison, Jas. H.	Hartsville	R. D
Beck, Flavius J.	Hartsville	R. D	Newton, W. T	Hope	R. D
Beck, W. H.	Hartsville	R. D	Norton, F. D.	Petersville	R. D
Biddinger, S. W	Waynesburg	E. 10	Roope, R. H.	Columbus	R. D
Cosby, Geo. O.	Burnsville	R. D	Roope, Alf. P.	Columbus	R. D
Carmichael, W. T	Walesboro	P. M. D	Rice, A	Columbus	H. D
Clark, J. S	Columbus	R. 10	Reynolds, S. H.	Columbus	R. D
Coffee, Wm.	Newbern	R. 10	Richards, E. B.	Taylorville	R. 10
Davis, Joseph H.	Azalia	R. 10	Regennas, Eug. G	Hope	R. D
Delong, O. A	Azalia	P. M. D	Reynolds, G. E.	Elizabethtown	R. D
Dickman, Fred.	Hope	H. 10	Rains, G. W	Jonesville	R. 3
Elrod, Moses N.	Hartsville	R. D	Roland, Wm	Columbus	R. D
Fitzpatrick, Bart.	Hope	R. D	Shane, T. A.	Columbus	H. D
Francis, E. F	Columbus	R. D	Stapp, S.	Hope	R. 10
Fogle, E. T.	Hartsville	E. D	Smalley, J. K	Hartsville	R. D
Fugate, Wm. I.	St. Louis cross'g	R. D	Stader, J. W	Walesboro	R. —
Hudson, J. B.	Columbus	E. D	Thompson, D. A.	Elizabethtown	R. D
Hauger, Z. H.	Columbus	R. D	VORIS, S. M.	Columbus	R. D
Hawley, K. D.	Columbus	R. D	Wright, J. F	Columbus	R. D
Holder, R. E.	Columbus	R. D	Wisner, W. E.	Columbus	R. D
Kineaid, S. F.	Taylorville	E. D	Witherell, Geo. M	Clifford	R. D

Regular, 44; Eclectic, 5; Physio-Medical, 2; Homeopathic, 3. Total, 54.

Benton County.

Bloom, —	Swanington	R. D	Hoag, J. H	Oxford	H. D
Brier, U. G	Fowler	P. M. D	Kolb, Johnathan	Oxford	R. 10
COOK, COOK	Fowler	R. D	Mavity, J. S	Fowler	R. D
Crume, G. P	Boswell	R. D	Mavity, D. E	Fowler	R. D
Fall, C. W	Oxford	R. 3	McConnell, H. C.	Oxford	E. D
Felch, E. P.	Fowler	H. D	Roberts, S. R.	Oxford	R. 10
Flack, O. M.	Ambia	R. —	Roelman, J. M.	Fowler	R. 10
Green, J. W.	Boswell	R. 3	Simpkins, J. C.	Boswell	R. 3
Green, Nellie E.	Fowler	R. 3	Smith, Ward A.	Otterbein	R. D
Hunter, A. F	Raub	E. D	Smith, J. Karl	Wadena	R. D

Regular, 15; Eclectic, 2; Homeopathic, 2; Physio-Medical, 1. Total, 20.

Blackford County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
BELL, C. L.	Hartford City. . . .	R. D	Warden, A.	Hartford City. . . .	E. D
Mason, C. R.	Hartford City. . . .	R. D	Mulvey, W. H.	Montpelier	R. D
Clouser, N. D.	Hartford City. . . .	R. D	Morrison, William	Montpelier	R. D
Cronin, W. N.	Hartford City. . . .	R. D	Sellers, S. R.	Montpelier	R. D
Clapper, M. M.	Hartford City. . . .	R. D	Emswiler, C. R.	Montpelier	R. D
Davidson, H. C.	Hartford City. . . .	R. D	Landen, L. C.	Trenton	R. D
Myers, Wm.	Hartford City. . . .	R. D	Herrald, Doctor	Dundee	R. D
Corey, C. W.	Hartford City. . . .	R. D	Wheeler, W. H.	Hartford City. . . .	H. D
Drayer, Peter.	Hartford City. . . .	R. D	Sage, J. W.	Hartford City. . . .	E. D

Regular, 15; Eclectic, 2; Homeopathic, 1. Total, 18.

Boone County.

Armstrong, E. M. . . .	Thorntown. . . .	R. D	Jordan, Thomas W. . . .	Whitestown	R. D
Alford, J. S.	Zionsville	R. D	Jones, A. B.	Lebanon. . . .	R. D
Auston, F. H.	Jamestown. . . .	E. D	Kane, John R.	Rosston. . . .	R. D
Ball, J. R.	Lebanon. . . .	R. D	McGee, James A.	Big Springs. . . .	P.-M. D
Batman, W. F.	Lebanon. . . .	R. D	McCormick, M. S.	Big Springs. . . .	R. D
Bennington, A. M. . . .	Max.	R. 10	McNutt, W. Y.	Zionsville	R. D
Bonnell, M. H.	Lebanon. . . .	R. D	Miller, A. O.	Lebanon. . . .	R. D
Banta, S. J.	Jamestown. . . .	R. 10	Porter, John R.	Lebanon. . . .	R. D
Bonnell, T. A.	New Brunswick. R. D		Purdy, J. C.	Terhuae	R. 3
Baugh, N. J.	Gadsden	R. D	Reagan, Jesse S.	Lebanon. . . .	R. D
Barris, D. E.	Thorntown. . . .	E. D	Redden, Thomas O.	Whitestown	R. D
Bruce, W. E.	Thorntown. . . .	H. D	Rose, M. H.	Thorntown	R. D
Boyd, J. M.	Thorntown. . . .	R. D	Smith, Carter H.	Lebanon. . . .	R. D
Burk, T. B.	Advance	R. D	Scull, D. C.	Lebanon. . . .	R. 10
Coones, H. N.	Lebanon. . . .	H. D	Steelsmith, J. M.	Rosston. . . .	R. D
Cotton, H. L.	Zionsville	R. D	Sanders, L. A.	Hazlerigg. . . .	R. D
Davis, D. D.	Thorntown. . . .	N. R. 10	SCHULTZ, W. H.	Lebanon. . . .	R. D
Donnon, W. A.	Lebanon. . . .	R. D	Turner, Thomas S.	Milledgeville. P.-M. D	
Everett, W. E.	White Lick. . . .	R. D	Umberhine, D. D.	Reese's Mill	M. D
Finch, A. M.	Jamestown. . . .	N. R. —	White, A. F.	Zionsville. . . .	N. R. —
Fitch, A. P.	Lebanon. . . .	E. D	Walker, D. R.	Reese's Mill	R. D
Hardy, W. S.	Lebanon. . . .	R. D	Worley, O. P.	Elizaville. . . .	P.-M. D
Heady, W. S.	Jamestown. . . .	R. D	Winters, W. H.	White Lick. . . .	R. D
Hamilton, J. A.	Advance	R. D	Little, P. B.	Elizaville. . . .	R. D
Hurt, George K.	Thorntown. . . .	R. D	Lee, D. F.	Zionsville	R. D
Hendricks, James L. . . .	Lebanon. . . .	R. D	Nee, R. E.	Thorntown	H. D

Regular, 41; Physio-Medical, 4; Homeopathic, 3; Eclectic, 2; not reported, 3. Total, 53

Brown County.

Axsom, Stanley	Elkinsville	E. D	Griffitt, Joseph G. . . .	Story	R. D
Browning, Nathan	Needmore	R. 3	Helton, A.	Belmont	—
Campbell, James B. . . .	Bean Blossom. . . .	R. 10	Moser, James P.	Spearsville	R. D
Fleener, Joseph N. . . .	Needmore	R. 10	ROSS, JOHN C.	Nashville	R. D
Genolin, John F.	Nashville	R. D	Wilson, Samuel C.	Pike's Peak	P.-M. 10
Griffitt, Arnold S.	Nashville	R. D	Ward, James G.	Bean Blossom	R. 3

Regulars, 9; Eclectic, 1; Physio-Medical, 1; not reported, 1. Total, 12.

Carroll County.

Angell, C.	Pittsburgh	R. —	Minnick, H. R.	Flora	— 10
Angell, C. E.	Delphi	R. —	Landes, B. F.	Burlington	E. —
Camp, Chas	Camden	E. —	Loop, W. M.	Deer Creek	R. —
Conway, P. W.	Ockley	R. —	Lyons, F. P.	Flora	R. —
Cromer, Jas. R.	Flora	E. —	Plank, Wm. H.	Deer Creek	R. —
Chittick, Andrew	Burlington	R. —	Robinson, F. H.	Delphi	H. —
Cook, A. J.	Flora	E. —	Shultz, J. J.	Delphi	E. —
Clymer, J. F.	Patton	R. 3	SHARER, W. F.	Delphi	R. —
Cochran, I. N.	Radner	R. —	Scholl, C. E.	Camden	R. —
Carter, Henry	Bringinghurst	E. —	Smith, W.	Delphi	R. —
Carney, C. E.	Pyrmont	R. —	Squier, E. W.	Delphi	E. —
Galbreth, W. H.	Kochfield. . . .	R. —	Snyder, B. F.	Camden	R. —
Jackson, C. P.	Bringinghurst	R. 10	Trabaugh, W. H.	Cutler	R. —
Kennard, J. L.	Yeoman	R. —	Tidrick, R. R.	Bringinghurst	R. —
Kidd, W. J.	Burlington	E. —	Walker, E.	Delphi	E. —

Regulars, 17; Eclectic, 9; Homeopathic, 1; not reported, 3. Total, 30.

Clark County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Adair, S. L.	N. Washington	R. D	Louis, —	Utica	—
Alhands, D. S.	N. Washington	R. D	Martin, F. A.	Jeffersonville	E. D
Arthur, W. R. B. (col.)	Jeffersonville	R. D	Mayfield, —	Bethlehem	R. D
Bruner, E. M.	Jeffersonville	R. D	Meloy, J. M.	Sellersburg	R. D
Bruner, Jacob	Jeffersonv.	N. R. —	Murphy, O. C.	Underwood	R. D
Bottorff, C. M.	Charlestown	R. D	McBride, Isaac	Jeffersonville	R. D
Coombs, D. H., Sr	Charlestown	R. D	McClure, David	Jeffersonville	R. D
Coombs, D. H., Jr	Charlestown	R. D	McClure, C. B.	Jeffersonville	R. D
Carr, F. M.	Oregon	R. D	McClure, S. C.	Jeffersonville	R. D
Conn, W. D.	Otisco	R. D	Nickles, J. M.	Sellersburg	R. D
Davis, J. T.	Jeffersonville	R. D	Peyton, D. C.	Jeffersonville	R. D
Elrod, —	Henryville	R. D	Reynolds, J. M.	Memphis	R. D
Field, D. L.	Jeffersonville	R. D	RUDELLE, I. N.	Jeffersonville	R. D
Fouts, W. K.	Jeffersonville	R. D	Secoy, S. H.	Jeffersonville	H. D
Federman, C. A.	Attica	R. D	Sharp, H. C.	Jeffersonville	R. D
Ferguson, H. H.	Henryville E. & R. D		Sheets, W. H.	Jeffersonville	R. D
Graham, T. A.	Jeffersonville	R. D	Stalker, B. F.	Borden	R. D
Graham, O. P.	Jeffersonville	R. D	Stockwell, John	Charlestown	R. D
Hart, Douglas	Sellersburg	R. D	Taggart, S. C.	Charlestown	R. D
Hause, Q. R.	Sellersburg	E. D	Taggart, John	Solon	R. D
Haggard, S. H.	Prather	R. D	Taggart, Albert	N. Washington	R. D
Haymaker, G. W.	Charlestown	R. D	Tichenor, J. B.	Nabbs	R. D
Hancock, C. F. C.	Jeffersonville	R. D	Walker, J. H.	Henryville	R. D
Henning, Robert	Jeffersonville	R. D	Wells, F. M.	Charlestown	R. D
Herne, Oliver.	Mearyville	R. D	Wheat, J. M.	Borden	R. D
Jackson, Sallie C	Jeffersonville	H. D	Williams, L. L.	Jeffersonville	R. D
Jones, Cadwalader	Charlestown	R. D	Work, W. F.	Charlestown	R. D
Lampton, G. W.	Jeffersonville	H. D	Zuerner, Joseph	Jeffersonville	R. D
Loomis, John	Jeffersonville	R. D			

Regular, 50; Eclectic, 2; Homeopathic, 4; not reported, 1. Total, 57.

Clay County.

Allen, H. P.	Bowling Green	R. 3	Modesitt, J. A.	Clay City	R. D
Byers, L. S.	Staunton	R. 3	Menough, Thos. F.	Brazil	R. D
Black, Silas D.	Brazil	R. D	McCullough, F. M.	Brazil	R. 3
Boor, M. A.	Staunton	R. D	Nall, A. H.	Hoosierville	R. 3
Broulette, A. L.	Clay City	R. D	Nussel, Frederick	Brazil	R. D
Culbertson, R. H.	Brazil	R. D	Oliver, J. B.	Brazil	R. D
Chamberlain, W. F.	Poland	R. D	Orr, Wm. H.	Harmony	R. D
Cushman, David W.	Cloverland	R. D	Pell, George M.	Carbon	R. D
Elliott, Thomas A.	Poland	R. D	Rundall, A. E.	Centre Point	R. D
Finley, Geo. W.	Harmony	R. D	Smith, J. F.	Brazil	R. D
Freed, M. A.	Clay City	R. D	Siner, F. M.	Knightsville	R. D
Gastineau, Henry	Hovesville	R. D	Swinehart, M. H.	Asherville	N. R. 10
Glasgo, Thos. A.	Brazil	R. 3	Spellbring, B. F.	Bowling Green	E. 3
Gantz, R.	Saline City	R. 3	Tulley, A. F.	Brazil	R. D
Gifford, J. C.	Brazil	R. D	Thornton, F. G.	Knightsville	R. 3
Gifford, W. H.	Brazil	R. D	Talbott, E. P.	Bowling Green	R. D
Griffith, L. C.	Cory	R. 3	Vanzandt, Wm. H.	Carbon	R. D
Hale, Levi A.	Clay City	R. 10	Veach, P. H.	Staunton	R. D
HAWKINS, R. W.	Brazil	R. D	Wolf, C. H.	Clay City	R. D
Holmes, Benj. F.	Asherville	R. D	Witty, B. F.	Perth	R. 10
James, Oliver.	Cory	R. D	Williams, John.	Bowling Green	E. 10
Mass, J. K.	Ashboro	R. D			

Regular, 40; Eclectic, 2; not reported, 1. Total, 43.

Clinton County.

Names.	Postoffice.	School.	Names.	Postoffice.	School.
Abston, Jesse M.	Michigantown	R. D	Knapp, S. O.	Frankfort	R. D
Andrews, James	Colfax	H. D	Koons, Monroe T.	Mulberry	R. D
Bergen, E. D.	Frankfort	H. D	Lambert, I. C.	Manson	P.-M. D
Bowers, Burton E.	Kirklin	R. D	McGuire, W. H.	Frankfort	E. D
Bogan, Elisha W.	Kirklin	R. D	McMurray, J. S.	Frankfort	R. D
Bowers, Valentine	Frankfort	R. D	Milburn, Joseph E.	Colfax	R. 10
BROWN, GEO. W.	Frankfort	R. D	Milburn, Robert	Manson	R. 3
Carson, —	Frankfort	R. D	Morrison, O. A. J.	Middlefork	R. D
Coon, Hiram J.	Colfax	R. D	Martin, Marquis L.	Forest	R. 10
Canfield, Moses S.	Frankfort	E. D	Panner, R. F.	Frankfort	R. D
Cooper, Wm. E.	Pick'd's Mills	P.-M. D	Parker, A. P.	Kirklin	R. 2
Cooper, Wilson T.	Scircleville	R. D	Parker, Joseph	Colfax	R. D
Cripe, Isaac	Frankfort	R. D	Peter, Ed. L.	Moran	R. D
Chittick, Charles	Frankfort	R. D	Peter, D. C.	Forest	R. D
Dearth, M. H.	Jefferson	R. 10	Powell, Thos. J.	Michigantown	R. D
Dunn, Joseph R.	Pickard's Mills	R. D	Robinson, Thos. J.	Rossville	R. D
Davis, Newton C.	Frankfort	H. D	Randall, W. B.	Pickard's Mills	R. 10
Douglass, Samuel	Frankfort	R. 10	Seigler, Jno. N.	Geitingsville	R. 3
Douglass, Isaac W.	Michigantown	R. D	Speitel, Henry B.	Frankfort	E. 10
Edmonds, Oscar W.	Frankfort	R. D	Smith, Wm. G.	Scircleville	R. D
Earhart, Isaac S.	Mulberry	R. D	Sims, S. B.	Frankfort	R. D
Fisher, John J.	Rossville	E. D	Thorp, Levi	Baylestown	R. D
Fisher, Samuel B.	Rossville	E. D	Utz, S. S.	Hillisburg	R. D
Gard, Oliver	Frankfort	R. D	Wise, James B.	Frankfort	H. D
Holmes, H. D.	Scircleville	R. 10	Wilson, Alex M.	Frankfort	R. 10
Holmes, W. A. T.	Kirklin	R. 3	Yundt, A. M.	Mulberry	R. D
Holmes, Theo. T.	Pickard's Mills	R. 10	Young, M. V.	Frankfort	R. D
Hornaday, Wm. H.	Forest	R. D			

Regular, 43; Homeopathic, 4; Eclectic, 5; Physio-Medical, 2; not reported, 1. Total, 55.

Crawford County.

Abell, G. H.	Grantsburg	— 10	Kellums, I. W.	Birdseye	R. 10
Baylor, G. W.	Milltown	R. D	Kimes, D. W.	Eckerty	N. R. 10
Brown, G. W. L.	Doelittle's Mi	L. R. 10	King, N. W.	Taswell	R. 10
Brown, J. F.	Millin	R. 10	Knight, Jno. B.	Mt. Prospect	R. 3
*Bushaw, B. E.	Marengo	R. 10	Luckett, C. D.	English	R. D
Ellis, Wm.	English	R. 10	Meeks, Lewis	West Fork	R. 10
Fetzer, Jno. E.	Marengo	R. D	Merrilees, W. M.	Beechwood	H. 10
Gibbs, Jno. R.	Milltown	R. D	Myers, Josephus	Alton	R. D
Gobbel, F. R.	Grantsburg	R. 3	Sanders, J. M.	Taswell	R. 10
Hammond, Jno. M.	English	R. D	Stewart, L. B.	Marengo	H. 10
Hawn, J. A.	Leavenworth	R. D	Walls, Jno. W.	Eckerty	R. D
HOLCROFT, W. R.	Alton	R. 10	*Davis, D. F.	Marengo	R. D
Hopper, I. J.	Milltown	H. R. D			

*Omitted by mistake. Regular, 19; Homeopathic, 2; not reported, 3. Total, 24.

Daviss County.

Anderson, J. W.	Odon	R. D	Millis, E. D.	Plainville	R. 10
Achor, J. M.	Cornettsville	R. 10	McPherson, S. L.	Montgomery	R. D
Carter, D. R.	Epsom	R. 3	McCown, C. C.	Washington	R. D
Clark, J. W.	Washington	R. D	McKittick, O. H.	Plainville	R. D
Culmer, S. O.	Odon	R. D	Parr, G. L.	Washington	R. D
Culmer, G. F.	Odon	R. D	Parks, J. F.	Cumback	R. D
Dearmin, John		E. 10	Ragsdale, M. H.	Glendale	R. 3
Diffendall, W. B.	Washington	H. D	Scudder, C. P.	Washington	R. D
Evans, W. L.	Loogootee	R. 10	Scanlan, Michael	Washington	R. D
Fitzgibbon, John	Washington	R. D	Smoot, D. B.	Glendale	R. D
Gers, Henry	Washington	R. D	Stanley, L. A.	Epsom	R. 10
Gibson, J. B.	Montgomery	R. D	Trainer, C. E.	Cornettsville	R. D
Harned, F. M.	Washington	R. D	Taylor, Harvey	Ragsville	R. D
Herr, H.	Washington	R. D	Toliver, M. P.	Elnora	R. 10
Harrall, W. A.	Washington	E. 10	Toliver, M. J.	Elnora	R. D
Hedrick, W. T.	Odon	H. 3	WILLEFORD, G. W.	Washington	R. D
Hedrick, J. T.	Alfordsville	H. 10	Willeford, W. C.	Washington	R. D
Hobbs, W. P.	Raglesville	R. 10	Winton, C. F.	Washington	R. D
Hilburn, E. W.	Washington	R. D	Way, J. W.	Alfordsville	R. D
Knapp, George	Washington	R. D	Young, M. H.	Raglesville	E. D
Lane, A. K.	Odon	R. 10	Young, C. C.	Elnora	E. D
Moore, J. L.	Washington	R. D	Yennee, C. H.	Washington	R. D
Moore, C. C.	Washington	R. D			

Regular, 38; Eclectic, 4; Homeopathic, 3. Total, 45.

Dearborn County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Bond, R. C. . . .	Aurora	R. D	Kyle, T. M. . . .	Aurora	R. D
Bond, E.	Lawrenceburgh R. D		Kyle, J. M. . . .	Aurora	R. D
Bowers, A. J. . .	Moore's Hill . .	R. D	Loder, F.	Near Harrison .	E. D
Boersig, Joseph A	Lawrenceburgh R. D		Lazenby, J. R. . .	Miller Tp. . . .	R. D
Bond, Marcus . .	Aurora	R. D	Liddle, J. R. . . .	Bright	R. D
Collier, Susan E. .	Guilford	P. M.—	Libbert, E. J. . .	Farmer's Retreat	R. D
Craig, T. E. . . .	Lawrenceburgh R. 3		Rectanus, F. . . .	Aurora	R. D
Collins, S. H. . .	Lawrenceburgh R. D		Ratcliff, J. F. . .	New Alsace . . .	R. 3
CHAMBERLAIN, S. B	Lawrenceburgh R. 10		Sale, F. H., Sr. . .	Aurora	R. D
Daughters, A. P. .	Moore's Hill . .	R. 10	Sale, J. H.	Dillsborough . .	R. D
Daughters, A. T. .	Moore's Hill . .	R. D	Sale, F. H., Jr. . .	Dillsborough . .	R. D
Duncan, Wm. F. . .	Kyle	R. D	Swales, H. W. . . .	Logan	R. D
Fagaly, Arthur T. .	Manchester . . .	R. D	Swales, Wm. H., Sr.	Logan	R. D
Ford, O. P. M. . . .	Dillsborough . .	R. D	Swales, Wm. H., Jr.	Logan	R. D
Fermier, P.	Wei-burg	R. D	Spalding, John . .	Dillsborough . .	R. D
Freeland, J. F. . .	Weisburg	R. D	Schooley, Wm. A. .	Guilford	R. D
Gatch, J. D. . . .	Lawrenceburgh R. D		Smith, Edwin . . .	Aurora	H. D
Henry, W. C. . . .	Aurora	R. D	Sutton, H. H. . . .	Aurora	R. D
Howe, Gustave . .	Near State Line R. D		Vogt, A. W.	New Alsace . . .	R. D
Heaton, C.	Aurora	R. D	Walters, C. A. . . .	Lawrenceburgh R. D	
House, J. W. . . .	Lawrenceburgh R. D		Wolfe, George . . .	Manchester . . .	H. D
Huber, Chas	Harrison	R. D	Weaver, S. M. . . .	Dillsborough . .	E. D
Hayward, M. P. . .	Lawrenceburgh H. D		Willette, W. H. H. .	Harrison	R. D

Regular, 40; Eclectic, 2; Physio-Medical, 1; Homeopathic, 3. Total, 46.

Decatur County.

ALEXANDER, J. H. .	Greensburg . . .	R. D	Howard, J. W. . . .	St. Paul	R. 3
Bracken, Wm. H. .	Greensburg . . .	R. 10	Hause, William . .	Westport	E. D
Beall, C. M.	Clarksburg . . .	R. D	Henser, Conrad . .	Milhausen	H. 10
Bunker, S. C. . . .	Greensburg . . .	E. D	Johnson, Thomas .	Greensburg . . .	R. D
Ballard, D. J. . . .	St. Paul	E. D	Johnson, Henry . .	Newpoint	R. 10
Burroughs, Jas. P.	Westport	R. D	Jacks, James R. . .	Adams	E. D
Beek, Condie B. . .	Waynesburg . . .	R. D	Jermain, L. W. D. .	Newpoint	R. D
Biddinger, S. W. .	Waynesburg . . .	R. D	Lorimer, I. H. D. .	Forest Hill . . .	R. D
Clark, Thos. J. . .	Letts Corner . .	E. D	Miller, T. E. F. . .	Westport	H. D
Covert, Cornelius .	Greensburg . . .	R. D	Parker, John W. . .	Adams	E. 10
Crowell, E. B. . . .	Greensburg . . .	E. D	Reily, John H. S. .	Sardinia	R. D
Crawford, Geo. S. .	Clifty	R. D	Smith, John L. . .	Clarksburg . . .	R. D
Daily, F. M.	Milhausen	R. 10	Schofield, John V. .	Greensburg . . .	R. D
Denny, G. E. . . .	Alert	N. R	Thomas, Richard M.	Greensburg . . .	R. D
Givan, S. E.	Burney	R. D	Vest, M. C.	Forest Hill . . .	R. 3
Gilchrist	Harris City . . .	R. D	Wright, S. V. . . .	Greensburg . . .	R. D
Goff, W. S.	St. Paul	H. 10	White, Benj. S. . .	Letts Corner . .	R. 3
Gullefer, T. B. . .	Greensburg . . .	H. D	Welb, W. H.	Adams	R. 10
Hitt, John Y. . . .	Greensburg . . .	R. D	Williams, M. H. . .	Letts Corner . .	R. D
Hitt, Sherman B. .	Greensburg . . .	R. D	Wood, James M. . .	Gaynorsville . .	R. D
Howard, Francis M.	St. Paul	R. D	Wooden, Wm. H. . .	Greensburg . . .	R. D

Regular, 31; Eclectic, 6; Homeopathic, 4; not reported, 1. Total, 42.

DeKalb County.

Bowen, M. M. . . .	Corunna	R. D	Lily, H.	Butler	H. D
Bennett, J. B. . . .	Butler	E. D	Miller, J.	Butler	R. 10
Brunson, V. C. . . .	Newville	R. D	Madden, W. H. . . .	Butler	R. 10
Bowman, H. W. . .	St. Joe	R. D	Matheny, T. G. . . .	Auburn	R. D
Buchtel, I. O. . . .	Auburn	H. D	Nusbaum, W. H. . .	Auburn	R. D
Bevier, Wm.	Waterloo	E. D	Philips, A. F. . . .	Corunna	R. D
Bevier, F.	Waterloo	E. 10	Showalter, J. E. . .	Waterloo	R. D
Broughton, F. . . .	Waterloo	R. D	Swarts, D. J.	Auburn	R. D
Carpenter, T. J. . .	Waterloo	R. D	Swarts, V. M. W. . .	Auburn	R. D
Carpenter, Wm. P. .	Butler	R. D	Snyder, F.	Corunna	R. D
Clevenger, J. A. . .	Garrett	R. D	Sebring, D. A. . . .	Auburn	R. 10
Carey, W. W. . . .	Auburn	R. D	Sheffer, B. F. . . .	St. Joe	E. D
Cass, L. H.	Auburn	R. D	Shook, N. J.	Spencerville . .	R. D
Darby, A. B.	Waterloo	E. D	Shumaker, W. F. . .	Butler	R. D
Farrington, A. S. .	Waterloo	E. 10	Sargent, T. C. . . .	Garrett	R. D
Fanning, F. W. . .	Butler	R. D	Skilling, J.	Garrett	R. D
HINES, F. M.	Auburn	R. D	Stewart, C. S. . . .	Garrett	R. D
Hines, L. A.	Auburn	R. D	Stewart, T. H. . . .	Garrett	E. D
Hines, W. L.	St. Joe	R. D	Strouse, J. P. . . .	Garrett	R. D
Hull, H. H.	Newville	R. 10	Thomson, J. F. . . .	Garrett	R. D
Hughes, J. W. . . .	Waterloo	R. 10	Wood, F. B.	Garrett	R. D

Regular, 33; Eclectic, 7; Homeopathic, 2. Total, 42.

Delaware County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Allen, Seth	Muncie	R. D	Mann, E. B	Muncie	R. D
Atkinson, J. M	Eaton	R. D	Marshall, Reuben . . .	Cowan	R. D
Ames, Geo. F.	Eaton	R. D	Mansfield, T. J	Royerton	R. D
Ball, L. L.	Muncie	R. D	McCrillius, Chas. C . .	Muncie	R. 3
Ballard, A. M.	Muncie	R. D	Martin, John S.	Muncie	H. D
Brandon, W. S.	Daleville	R. D	Munsey, D. O.	Gaston	R. D
Baird, John V.	Albany	E. D	Murray, Albert P. . . .	Albany	R. D
Baird, Mary A.	Albany	E. D	Murray, Albert L. . . .	Eaton	R. 10
Bell, John N.	New Burlington. R. D		Mitchell, Harvey	Muncie	R. 10
Bohannon, Chas. L. . .	Muncie	E. D	Payton, Lewis	Muncie	P.-M. D
Bowers, Joseph F. . . .	Muncie	R. D	Phinney, Arthur J. . . .	Muncie	H. D
Bowles, Thomas J. . . .	Muncie	R. D	Polk, E. E	Muncie	P.-M. D
Boyden, W. J.	Muncie	R. D	Powers, U. G.	Albany	R. D
Bucklin, Geo. W.	Muncie	R. D	Poland, U. G.	Muncie	R. D
Bunch, R. A.	Muncie	E. D	Puckett, Elijah J. . . .	Muncie	R. D
Beck, Isaac E.	Muncie	P.-M. D	Quick, John C.	Muncie	P.-M. D
Cecil, A. A.	Cowan	R. D	Ross, John C.	Muncie	E. 3
Comstock, J. S. D. . . .	Cowan	R. 10	Ried, S. M.	Muncie	R. D
Cattrell, D. W.	Muncie	R. 10	Reasoner, O. I.	Shideler	R. D
COWING, HUGH A. . . .	Muncie	R. D	Ricks, Martin W.	Muncie	P.-M. D
Dick, P. B.	Muncie	E. D	Richard, Wm. A.	Muncie	E. D
De Farour, Jos. L. . . .	Albany	R. 3	Shields, Edgar A.	Muncie	R. D
Dill, N. C.	De Soto.	R. D	Shively, A. H.	Yorktown.	R. D
Dowell, John A.	Albany	E. D	Schenk, Chas. H.	Oakville	P.-M. D
Downing, J. R.	Yorktown	R. D	Shoemaker, D. M.	Muncie	E. D
Dunn, W. H.	Gaston	R. D	Spurgeon, Wm. A. . . .	Muncie	P.-M. D
Eastes, Wm. T.	Muncie	R. D	Smith, A. K.	Muncie	H. D
Ellis, E. W.	Muncie	P.-M. D	Smith, Chas. W.	Seima.	R. D
Fallis, Amos L.	Gaston	P.-M. D	Shively, David M.	Yorktown	R. D
Frazier, Chas.	Muncie	R. D	Shideler, Joseph K. . . .	Muncie	R. 10
Germand, John E.	Muncie	R. D	Summers, Henry C	Daleville	R. 10
Griffith, E. T.	Muncie	E. D	Stick, Jesse	Albany	E. D
Griffin, A. M. Lemon . .	Muncie	R. D	Schaub, David	Muncie	N. R. 10
Good, Alonzo H.	Selma.	R. 10	Searey, G. H.	Muncie	R. D
Green, Geo. R.	Muncie	R. D	Snodgrass, B. D.	Cammaek.	P.-M. D
Harris, Jesse M.	Muncie	R. 10	Snodgrass, Mrs. N. E. . .	Cammaek.	P.-M. D
Hastings, Seth G.	Muncie	H. D	Trent, I. N.	Muncie	R. D
Hayden, J. H.	Stout	P.-M. D	Thornton, Thos. F.	Muncie	R. D
Jackson, Frank G. . . .	Muncie	R. D	Trowbridge, David L. . .	Muncie	E. 10
Jeffrey, H. S.	Reed	R. D	Tuttle, John R.	Wheeling	R. 3
Jones, Auburn C.	Muncie	H. D	Winans, H. M.	Muncie	R. D
Julian, James F.	Gaston	E. D	Whitney, W. D.	Muncie	H. D
Kemper, G. W. H. . . .	Muncie	R. D	Whitney, Mrs. E. A. . . .	Muncie	H. D
Leech, Garret D.	Muncie	R. D	Wroughton, S. W.	Muncie	—

Regular, 55; Eclectic, 11; Homeopathic, 7; Physio-Medical, 12; not reported, 4. Total, 89.

Dubois County.

Bean, A. M	Ireland	E. D	Lukemyer, E. G	Huntingburg	R. D
Bigham, O. A	St. Anthony	R. D	Lockett, —	Celestine	R. D
BRANNOCK, B. B. . . .	Jasper	R. D	McMahan, W. R.	Huntingburg	R. D
Coble, P. L.	Dubois	R. 3	Montgomery, Geo. B . .	Huntingburg	R. D
Cole, John A.	Haysville	R. D	Ramsbrok, C. R.	Huntingburg	R. D
Gengelbach, E. E	Huntingburg.	E. D	Rust, W. F.	Holland	R. D
Glezen, E. A.	Ireland	R. 10	Salb, John P.	Jasper	R. D
Gobbel, Frederick	Birdseye	R. D	Schwarz, C. W.	Huntingburg	R. D
Hermann, W. H.	Altoga	R. D	Speedy, W. S.	Birdseye	R. D
Jenkins, J. M	Portersville	R. D	Stephenson, Edward . . .	Jasper	R. 10
Johnson, L. B	Ireland	R. D	Simmons, C. N.	Schnellville	R. D
Kempf, E. J.	Jasper	R. D	Stork, H. W.	Holland	R. D
Kempf, Paul H.	Ferdinand	R. D	Whittinghill, B. F. . . .	Ellsworth	— 10
Knapp, Victor	Ferdinand	R. D	Williams, G. P.	Huntingburg	R. D
Line, W. A.	Hillham	R. D	Wollenmann, A. G. . . .	Ferdinand	R. D
Line, W. M.	Hillham	R. D			

Regular, 28; Eclectic, 2; not reported, 1. Total, 31.

Elkhart County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Aitkins, F. M. . . .	Bristol	R. D	Hoover, Josephine S. .	Goshen	R. D
Ash, Elmer E. . . .	Goshen	R. D	Hoover, John S. . . .	Goshen	H. 10
Baker, D. W. . . .	Benton	R. 10	Inks, John S. . . .	Nappanee	R. D
Barbour, J. E. . . .	Bristol	H. D	Irwin, A. J. . . .	Goshen	R. D
Barney, Lee M. . . .	Elkhart	R. D	Jackson, A. C. . . .	Goshen	R. 10
Barwick, F. W. . . .	Wakarusa	H. D	Johnson, W. W. . . .	Goshen	R. D
Baumgartner — . . .	Elkhart	R. 10	Jennings, J. W. . . .	Miller-burg . . .	R. D
Beyerle, Henry J. . .	Goshen	R. D	Kauffman, Mrs. A. G. .	Goshen	E. 10
Bower, C. C. . . .	Elkhart	R. D	Knepple, W. H. . . .	Wakarusa	R. 3
Bowman, W. E. . . .	Elkhart	R. D	Kreider, M. K. . . .	Goshen	H. D
Bowser, John M. . . .	Goshen	R. D	Kreider, W. B. . . .	Goshen	H. D
Cassell, Elizabeth . .	Elkhart	R. D	Kyler, W. B. . . .	Benton	R. 10
Champney, F. J. . . .	Elkhart	R. D	Latta, M. M. . . .	Goshen	R. D
Chaeffer, Frank . . .	Bristol	R. D	Lockwood, R. L. . . .	Elkhart	H. D
Croper, Andrew J. . .	Elkhart	R. D	Matthews, James . . .	New Paris	R. D
Cotter, James	Elkhart	R. D	Merrill, C. W. . . .	Goshen	R. D
Cook, Albert J. . . .	Goshen	R. D	Miller, D. L. . . .	Goshen	R. D
Darling, L. B. . . .	Elkhart	R. D	Montgomery, T. (col.)	Elkhart	R. 10
Defrees, H. J. . . .	Nappanee	R. D	Myers, J. N. . . .	Millersburg . . .	E. D
Dreese, C. L. . . .	Goshen	R. D	Peck, Eva M. . . .	Goshen	R. E
Dutrow, Chas. E. . .	Bristol	R. D	Searer, Christian . . .	Elkhart	R. D
Eckleman, F. C. . . .	Elkhart	R. D	Sensenick, A. S. . . .	Wakarusa	R. D
Eckleman, M. M. . . .	Elkhart	R. D	Shoemaker, Geo. L. . .	Nappanee	H. D
Edwards, Lewis H. . .	Elkhart	R. D	Short, I. W. . . .	Elkhart	R. D
Eisenbeiss, Chas. . .	New Paris	R. D	Sparklin, C. C. . . .	Goshen	R. 3
Farver, Wm. . . .	Middlebury	R. D	Spohn, Geo. W. . . .	Elkhart	R. D
Fisher, A. L. . . .	Elkhart	H. D	Stuckman, Wm. . . .	New Paris	R. D
Frink, C. W. . . .	Elkhart	R. D	Shaffer, E. L. . . .	Nappanee	E. D
Greiner, G. G. . . .	Vistula	R. 3	Stauffer, H. R. . . .	Nappanee	R. D
Haggerty, R. Q. . . .	Elkhart	R. D	Teeters, E. F. . . .	Middlebury	R. D
Hani, W. F. . . .	Elkhart	R. D	Thomas, W. H. . . .	Elkhart	H. D
HEATWOLE, J. H. . . .	Goshen	R. D	Turner, Porter	Elkhart	H. D
Herring, Frederick . .	Goshen	E. 10	Whippy, W. A. . . .	Goshen	H. D
Horsch, Jacob	Elkhart	R. D	Whitmer, B. F. . . .	Goshen	R. D
Horton, Mrs. Alice . .	Elkhart	R. D	Wilson, Albert V. . . .	Elkhart	R. D
Howenstein, G. W. . .	Elkhart	R. D	Work, J. A. . . .	Elkhart	R. D
Hoover, John M. . . .	Goshen	R. D	Valette, W. O. . . .	Goshen	R. D

Regular, 59; Homeopathic, 11; Eclectic, 4. Total 74.

Fayette County.

Andrews, James . . .	Connersville . . .	H. D	McNutt, G. T. . . .	Connersville . . .	R. D
Chitwood, Joshua . .	Connersville . . .	R. D	Phares, O. P. . . .	Connersville . . .	R. D
Chitwood, John E. . .	Connersville . . .	R. D	Roberts, Mrs. E. . .	Connersville P.-M.	D
Chitwood, Frank A. .	Connersville . . .	R. 10	Sipe, K. W. . . .	Orange	R. D
Dailey, Jesse J. . . .	Orange	E. 10	Shepard, Solomon D. .	Everton	R. D
Davidson, Anna . . .	Connersville P.-M.	D	Smalley, John G. . .	Connersville . . .	R. D
Derbysire, E. . . .	Bentouville . . .	R. D	Smalley, Mrs. Maud .	Connersville . . .	R. D
Dillman, L. D. . . .	Connersville . . .	R. D	Tingley, Uriah B. . .	Harrisburg	R. D
Ford, Thomas J. . . .	Connersville . . .	R. D	Turner, John	Null's Mills	E. 10
HAMILTON, S. W. . . .	Connersville . . .	R. D	Tyrrell, A. D. . . .	Connersville . . .	E. 10
Heron, Nathan	Connersville . . .	H. 10	Vance, Samuel W. . .	Connersville . . .	R. D
Larimore, J. D. . . .	Connersville . . .	R. D	Wall, John	Connersville . . .	R. 10
Logee, H. M. . . .	Connersville . . .	H. D	Wyman, Charles . . .	Everton	R. D
Ludwick, Verner . . .	Connersville . . .	R. D			

Regular, 19; Eclectic, 3; Homeopathic, 3; Physio-Medical, 2. Total, 27.

Floyd County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Bowman, Charles. . .	New Albany. . .	R. D	LEMON, JOHN H. . .	New Albany. . .	R. 10
Beust, Max. . .	New Albany. . .	R. D	Levi, L. D. . .	New Albany. . .	H. D
Beust, Bernhart. . .	New Albany. . .	R. D	McIntyre, C. W., Sr. .	New Albany. . .	R. D
Buley, David M. . .	. . .	R. D	Maienthal, Benj. L. .	New Albany. . .	R. D
Burney, W. A. . .	New Albany. . .	R. D	McKinney, M. V. . .	. . .	R. D
Clapp, W. A. . .	New Albany. . .	R. D	Mitchel, F. A. . .	. . .	R. D
Cannon, George H. .	New Albany. . .	R. D	Morgani, Emanuel. .	. . .	R. D
Cook, Charles P. . .	New Albany. . .	R. D	Needham, H. J. . .	New Albany. . .	H. D
Davis, James M. . .	Greenville. . .	R. D	Neat, Thomas C. . .	New Albany. . .	R. 10
Davis, C. P. . .	Galena. . .	R. D	Rogers, S. T. . .	New Albany. . .	E. D
Easley, E. P. . .	New Albany. . .	R. D	Rutherford, R. S. . .	Greenville. . .	E. D
Erni, J. O. . .	New Albany. . .	H. D	Sigmon, E. L. . .	New Albany. . .	R. D
Garey, Dumont. . .	New Albany. . .	R. D	Sloan, John. . .	. . .	R. D
Gresham, George W. .	New Albany. . .	R. D	Stewart, John L. . .	New Albany. . .	R. D
Huggins, R. H. . .	. . .	R. D	Severinghaus, E. A. .	New Albany. . .	H. D
Hazelwood, John. . .	New Albany. . .	R. D	Taggart, W. J. . .	Georgetown. . .	R. D
Harris, R. W. . .	New Albany. . .	R. D	Wilcox, S. C. . .	New Albany. . .	R. D
Hauss, A. P. . .	New Albany. . .	R. D	Wilcox, Frank H. . .	New Albany. . .	R. D
Jones, James H. . .	New Albany. . .	R. D	Wolf, H. S. . .	New Albany. . .	R. D
Loesch, George. . .	. . .	R. D			

Regular, 32; Homeopathic, 4; Eclectic, 3. Total, 39.

Fountain County.

Armstrong, L. P. . .	Newtown. . .	R. D	Mendenhall, W. . .	Kingman. . .	E. D
Aydelotte, Thos. E. .	Newton. . .	R. D	McNeill, Scott. . .	Veedersburgh. .	R. D
Burlington, J. C. . .	Attica. . .	E. D	Moore, Pat. B. . .	Kingman. . .	R. D
Blu, M. L. . .	Coal Creek. . .	R. D	Myers, L. C. . .	Covington. . .	R. D
Case, M. T. . .	Attica. . .	R. D	Orrhood, Job D. . .	Coal Creek. . .	R. D
Claypool, —. . .	Newtown. . .	R. D	Parker, John. . .	Mellott. . .	R. 3
Colvin, C. M. . .	Attica. . .	R. D	Rifle, John. . .	Veedersburgh. .	R. D
Dowden, J. W. . .	Yeddo. . .	E. 10	Rice, John T. . .	Attica. . .	R. D
Evans, John M. . .	Mellott. . .	R. D	Rupert, A. M. . .	Attica. . .	R. D
Fine, E. M. . .	Veedersburgh. .	R. D	Rowland, George. .	Covington. . .	R. D
Finney, Chas. J. . .	Attica. . .	R. D	STOUT, W. M. R. . .	Covington. . .	R. D
Goodwin, G. . .	Veedersburgh. .	R. D	Songer, F. . .	Hillsboro. . .	R. D
Hays, Geo. S. . .	Hillsboro. . .	R. D	Sparks, Joseph T. .	Yeddo. . .	R. 10
Henderson, J. T. . .	Covington. . .	R. D	Shoaf, F. A. . .	Yeddo. . .	R. D
Henderson, T. M. . .	Covington. . .	R. D	Talbot, J. N. . .	Wallace. . .	R. D
Hall, S. A. . .	Stone Bluff. . .	R. D	Young, B. F. . .	Veedersburgh. .	R. D
Jones, Geo. S. . .	Covington. . .	R. D	Zinn, J. K. . .	Covington. . .	P-M. D
Livengood, J. A. . .	Wallace. . .	R. D			

Regulars, 31; Eclectics, 3; Physio-Medical, 1. Total, 35.

Franklin County.

Abbott, June. . .	Peppertown. . .	E. D	Martin, Lafayette. .	Metamora. . .	E. D
Anness, William R. .	Bath. . .	E. 3	Morgan, John O. . .	Springfield. . .	R. D
Berry, William H. . .	Brookville. . .	R. D	Owens, Robert J. . .	Cedar Grove. . .	R. D
Bertenshaw, Thos. F.	Drewersburg. . .	E. 3	Patterson, E. L. . .	Brookville. . .	R. D
Buckingham, Geo. B.	Brookville. . .	R. D	Quick, John H. . .	Brookville. . .	R. D
Carter, Calvin. . .	Brookville. . .	R. D	Reed, Lewis B. . .	Fairfield. . .	R. D
Coffey, Bert. . .	Laurel. . .	E. D	Seal, Frank E. . .	Mt. Carmel. . .	E. D
Dunn, Isaac. . .	Andersonville. .	R. D	Schum, Charles. . .	St. Peters. . .	R. 10
Forrey, B. F. . .	Bath. . .	R. D	Simmons, E. . .	Laurel. . .	E. 3
Garigues, Israel D. .	Cedar Grove. . .	R. D	Smith, A. J. . .	Metamora. . .	R. D
Gifford, Samuel A. .	Laurel. . .	R. D	Spillman, Frank J. .	Andersonville. .	R. D
Gregory, Henry. . .	Laurel. . .	N. R.	SQUIER, GEO. E. . .	Brookville. . .	E. D
Henser, Conrad. . .	Oldenburg. . .	E. D	Stoddard, S. P. . .	Brookville. . .	E. D
Holliday, David A. .	Oldenburg. . .	R. D	Timmerman, Ernst. .	Huntersville N. R.	—
Lewis, Robert F. . .	Mt. Carmel. . .	R. D	West, James F. . .	Brookville. . .	R. D
Linegar, Daniel B. .	Whitcomb. . .	E. 3	Young, F. P. . .	Oldenburg. . .	R. N. R
Maguire, W. W. . .	Metamora. . .	R. 10			

Regular, 20; Eclectic, 11; not reported, 2. Total, 33.

Fulton County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Baily, A. L.	Akron	E. 10	Loring, C. J.	Rochester	R. D
Brown, Angus	Rochester	H. 3	Mitxler, J. B.	Rochester	N. R. —
Bitters, F. P.	Rochester	R. D	Morres, J. M.	Fulton	R. 10
Bertrand, W. T.	Leiter's Ford	R. D	Overmeyer, B. F.	Leiter's Ford	R. 3
Clymer, N. J.	Rochester	E. D	Rannels, J. N.	Rochester	E. D
Dunfree, Joseph	Tiosa	P.-M. D	Rhodes, E. E.	Rochester	R. D
Doak, J. T.	Tiosa	R. 3	Robbins, A. M.	Rochester	R. D
Fish, S. R.	Bloomingsburg	E. 10	Richards, John	Blue Grass	N. R. 3
Gould, Vernon	Rochester	R. D	Shafer, W. S.	Rochester	E. D
Gould, C. E.	Rochester	R. D	Shields, A. M.	Rochester	R. D
Harter, C. F.	Akron	R. D	Shipley, J. B.	Fulton	P.-M. D
Hector, C.	Rochester	E. D	Washburn, E. P.	Kewanna	R. D
Howard, J. O.	Kewanna	E. 10	Washburn, J. M.	Kewanna	R. D
IOBNS, J. W.	Rochester	H. —	Ward, J. W.	Kewanna	R. D
Johnson, A.	Akron	R. 3			

Regular, 16; Physio-Medical, 2; Eclectic, 7; Homeopathic, 1; not reported, 2. Total, 28.

Grant County.

Adkins, J. C.	Marion	E. —	Goodwin, Eugene B.	Marion	R. D
Ardery, Oscar		R. D	Godsmark, Otho C.		P.-M. —
Ader, Henry		P.-M. —	Hollis, Samuel	Upland	R. D
Ayres, Stephen D.	Marion	R. D	Henley, Alpheus	Fairmount	R. D
Anderson, John T.	Swayzee	E. 10	Hubbard, Wm. H.	Marion	R. D
Abbott, Harrison B.		P.-M. —	Hamilton, A. A.	Marion	R. D
Armstrong, James		P.-M. —	Horne, Samuel S.	Jonesboro	R. D
Avaline, Francis X.	Marion	E. D	Hough, W. A.	Marion	P.-M. —
Barnes, Robert A.	Marion	E. D	Howe, Lawrence E.		P.-M. —
Barnes, Eleanor V.	Marion	E. D	Harden, Alfred		P.-M. —
Barnes, William C.	Marion	R. D	Harden, Mrs. C. A.		P.-M. —
Bailey, Hiram R.		E. D	Harden, Samuel A.		P.-M. —
Baldwin, M. F.	Converse	E. D	Heck, Staunton		N. R. D
Borden, C. B.	Marion	R. D	Hollis, Ella A.	Upland	R. D
Beck, Isaac E.		P.-M. —	Haines, Howard C.		P.-M. —
Barnes, Dawson E.		E. D	Holladay, Thos. F.		N. R. D
Bennett, Carrie S.	Marion	P.-M. —	Houser, Burvia Alden		N. R. D
Baldoser, J. F.		P.-M. —	Hailey, Wm. H.		E. D
Brundage, Samuel P.	Marion	R. D	Hinshaw, Wm. H.		P.-M. —
Bryan, L. D.		R. D	Hockett, Clarkson P.		P.-M. —
Beauchamp, H. W.		P.-M. —	Haun, Maria		P.-M. —
Berry, John L.		R. D	Hayden, John H.		P.-M. —
Coldren, Wm. R.	Marion	P.-M. —	Hawkins, L.		P.-M. —
Corey, Lavanner	Van Buren	R. D	Hughes, Wm. A.		P.-M. —
Corey, Lewis J.	Van Buren	R. D	Hatfield, Wm. A.		P.-M. —
Carey, Isaac	Marion	P.-M. —	Houser, James A.		P.-M. —
Clouser, Nelson D.		N. R. —	Hobbs, Alice L.		P.-M. —
Combs, Albert H.	Marion	R. D	Innes, Robert E.		N. R. D
Chew, William A.		P.-M. —	Jones, Enoch P.	Marion	E. D
Clark, Battle		P.-M. —	Jones, Charles R.		E. D
Cronin, M. D.		R. D	Jackson, Logan M.		N. R. D
Crumrine, Ira S. J.	Landesville	R. D	Jones, Charles A.		P.-M. —
Carper, Philip D.		R. D	James, Charles S.		P.-M. —
Daniels, George W.	Sweetser	R. D	Johnson, John M.		P.-M. —
Dickens, James L.		R. D	Knight, John C.	Jonesboro	R. D
Davis, Samuel H.	Marion	E. D	Kimball, T. C.	Marion	R. D
Davis, Joel R.		P.-M. —	Kimball, A. D.	Nat'l Mil. Home	R. D
Davis, Emily J.		P.-M. —	Kersey, James B.		P.-M. —
Dawson, Charles F.		P.-M. —	Keen, Daniel P.	Marion	N. R. —
Doud, Judson W.		E. D	Keene, Edward R.		P.-M. —
Daniels, W. V.		E. D	Keller, Henry E.		N. R. D
Dunfee, Joseph W.		P.-M. —	Lawshe, Isaac F.	Swayzee	R. D
Dowell, George W.		P.-M. —	Langston, Edgar	Point Isabel	N. R. D
Edgington, Benj. F.		P.-M. —	Lord, J. Levi	Marion	R. D
Eckert, Charles H.	Marion	R. D	Lyle, John B.	Marion	R. D
Egbert, R. E.		R. D	Landess, George A.		E. D
Elliott, George W.		P.-M. —	Litzenberger, O. P.	Converse	R. D
Flynn, William	Marion	R. D	Ludlum, Benjamin	Marion	R. D
Forrest, John H.	Marion	E. D	Lowman, Joseph O.		P.-M. —
Fallis, Amos L.		P.-M. —	Loveland, W. S.		P.-M. —
Friermood, Ezra K.		R. D	Leach, Thomas J.		P.-M. —
FRANCIS, W. R.	Marion	R. D	Munsey, J. S.		N. R. D
Fruth, David O.		P.-M. —	Moon, Allen		P.-M. —
Fisher, Martin L.		P.-M. —	Meek, John A.	Jonesboro	R. D
Fite, Calvin		P.-M. —	Morris, George P.		N. R. D
Fankboner, Wm. A.	Marion	R. D	Mock, James F.	Marion	N. R. D
Fraser, Wm. W.		E. D	Moore, Charles V.	Fairmount	R. D
Gordon, Mary L.		E. D	Manring, N. H.	Rigdon	R. D

Grant County—Continued.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Moore, Stephen W . . .	Marion . . .	E. D	Salisbury, Walter A . . .		P. M. —
Marlow, Austin F . . .		E. D	Smith, Charles W . . .		P. M. —
Munsey, Lola . . .	Marion . . .	P. M. —	Swarts, W. W . . .		P. M. —
Mann, Jesse E . . .		N. R. D	Stoner, J. J . . .	Marion . . .	E. D
Merritt, T. Gray . . .		N. R. D	Smith, Lorin W . . .		N. R. D
Morris, Mrs. M. Ray . . .		P. M. —	Strong, Jud. A . . .		R. D
Myers, R. C . . .		P. M. —	Stout, O. M . . .		P. M. —
Miller, Joseph . . .		P. M. —	Snodgrass, B. K . . .		P. M. —
Mendenhall, J. W . . .		P. M. —	Schirack, John A . . .		P. M. —
McGrew, Wm. H . . .		N. R. D	Stephenson, George . . .		P. M. —
McKinney, Geo. W . . .	Jonesboro . . .	R. D	Street, Rebecca . . .		P. M. —
McKinsey, Wm. M . . .	Marion . . .	N. R. 10	Schenck, Chas. H . . .		P. M. —
McKewn, John . . .		N. R. D	Shanahan, A. A . . .		P. M. —
McClain, Handaville A . . .		P. M. —	Stephens, Atta C . . .		P. M. —
McKinnon, Malcolm . . .		N. R. D	Shipley, John B . . .		P. M. —
McKay, James D . . .	Marion . . .	R. D	Saunders, Jesse E . . .		P. M. —
Nuzum, David P . . .		E. D	Saunders, Joel E . . .		P. M. —
Neel, John W . . .		P. M. —	Schenck, Frederick . . .		P. M. —
Nolder, Samuel M . . .	Fairmount . . .	R. D	Thomas, Wm. B . . .		R. D
Patterson, Jos. W . . .	Fairmount . . .	R. D	Thomas, Rosa E . . .		P. M. —
Page, H. G . . .		P. M. —	Trimble, Darius S . . .		P. M. —
Pugh, John W . . .		N. R. D	Thomas, H. A . . .		P. M. —
Pugh, Jefferson . . .		N. R. D	Tomasek, Thomas . . .		P. M. —
Powell, J. H . . .		P. M. —	Thomas, Elvira R . . .		P. M. —
Powell, Albert H . . .	Marion . . .	R. D	Votaw, Mrs. R. A . . .	Marion . . .	P. M. —
Pierce, John W . . .		N. R. D	Vigus, Charles B . . .	Fairmount . . .	N. R. D
Parker, Albert . . .		P. M. —	Williams, Lewis . . .	Marion . . .	R. D
Reasoner, Wm. S . . .		P. M. —	Whitson, Eli M . . .	Jonesboro . . .	R. D
Reed, L. M . . .		P. M. —	Williamson, P. E . . .	Sweetser . . .	R. D
Ramer, Buchanan . . .		P. M. —	Wharton, Wm. L . . .		R. D
Shiveley, Marshal T . . .	Marion . . .	R. D	Wall, M. M . . .	Marion . . .	H. D
Snodgrass, David B . . .	Marion . . .	P. M. —	Ward, James B . . .		R. D
Stout, O. L . . .	Upland . . .	R. D	Ware, C. M . . .		N. R. D
Stephens, Alfred B . . .		P. M. —	Webster, E. C . . .	Marion . . .	N. R. D
Seal, Isaac N . . .	Hackleman . . .	R. D	Williams, David A . . .	Marion . . .	E. D
Small, N. W . . .		E. D	Wilkerson, W. W . . .		P. M. —
Swisher, Francis M . . .		P. M. —	Wilson, Olive A. C . . .	Fairmount . . .	R. D
Snodgrass, Mary . . .	Marion . . .	P. M. —	Wimmer, James M . . .	Marion . . .	R. D
Snodgrass, Samuel J . . .		P. M. —	Wilkerson, Hattie L . . .		P. M. —
Snodgrass, Benj. D . . .		P. M. —	Wegert, W. R . . .		P. M. —
Sage, John W . . .		E. D	White, Daniel O . . .		P. M. —
Studley, Joseph W . . .	Marion . . .	N. R. D	Woody, T. Frank . . .		P. M. —
Stuart, John G . . .		N. R. D	Whitson, John S . . .	Jonesboro . . .	R. D
Stephens, Anna T . . .		P. M. —	Wilson, John Edwin . . .		N. R. D
Stephens, Cyrus N . . .		P. M. —	Welker, A. E . . .		N. R. D
Spicer, John H . . .		P. M. —	Zinn, Jacob K . . .		P. M. —
Shellebarger, E. B . . .		N. R. D			

Regular, 53; Eclectic, 24; Physio-Medical, 96; Homeopathic, 1; not reported, 30. Total, 209.

Greene County.

Acton, Wm. G . . .	Switz City . . .	N. R. 10	Lowder, H. R . . .	Bloomfield . . .	R. D
Arnold, J. G . . .	Lyons . . .	N. R. 10	Little, Hosea Anson . . .	Linton . . .	R. D
Aydelotte, Thomas . . .	Worthington . . .	R. 3	Marshall, Alfred F . . .	Jacksonville . . .	R. 3
Burge, Nicholas C . . .	Park . . .	N. R. 10	Mullane, Joseph . . .	Lyons . . .	R. D
Burke, Wm. H . . .	Scotland . . .	R. D	Minich, James A . . .	Worthington . . .	R. D
Bridwell, Lafayette . . .	Owensburg . . .	R. 3	McCabe, Henry H . . .	Worthington . . .	E. D
Beatty, Wm. H . . .	Worthington . . .	R. D	Newman, Wm. N . . .	Linton . . .	E. 10
Cook, Peter M . . .	Solsberry . . .	R. D	O'Neal, Wm. A . . .	Worthington . . .	N. R. 10
Cravens, Samuel C . . .	Bloomfield . . .	R. D	Rose, B. A . . .	Linton . . .	R. D
Cravens, E. R . . .	Marco . . .	R. D	Squires, Wm. B . . .	Worthington . . .	E. D
Cravens, Wm. R . . .	Bloomfield . . .	R. D	Sherwood, Elmer T . . .	Linton . . .	R. D
Darment, Chas. R . . .	Newberry . . .	R. D	SELFIDGE, W. R . . .	Worthington . . .	R. D
Faith, Abraham H . . .	Linton . . .	R. D	Sims, J. A . . .	Lyons . . .	R. D
Gray, John W . . .	Bloomfield . . .	R. D	Sherwood, B. M . . .	Newberry . . .	R. D
Gray, George B . . .	Worthington . . .	R. D	Sherwood, H. I . . .	Newberry . . .	R. D
Gray, Simeon . . .	Worthington . . .	R. 3	Simmons, James S . . .	Lyons . . .	R. D
Gray, Ephraim E . . .	Bloomfield . . .	R. D	Shirts, Elmer . . .	Lyons . . .	R. D
Green, William L . . .	Worthington . . .	E. D	Selfridge, Wm. T . . .	Switz City . . .	R. D
Hurrah, John M . . .	Switz City . . .	R. D	Talbott, James E . . .	Linton . . .	R. D
Hannan, John W . . .	Scotland . . .	R. D	Thomas, G. A . . .	Linton . . .	R. D
Herved, Henry . . .	Switz City . . .	R. 10	Wheeler, Thomas . . .	Bloomfield . . .	R. D
Jackson, E. J . . .	Linton . . .	R. 3	Young, Jacob B . . .	Newark . . .	R. D

Regular, 36; Eclectic, 4; not reported, 4. Total, 44.

Hamilton County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Andrews, W. E.	Cicero	R. D	Miesse, A.	Noblesville	R. D
Aldred, J. A.	Hortonville	R. D	Moore, G. B.	Arcadia	R. D
Applegate, J. A.	Eagletown	R. D	Millikan, H. W.	Sheridan	P.-M. D
Axline, J. A.	Noblesville	R. D	McMurtry, J. T.	Boxly	R. D
Benson, J. L.	Noblesville	R. D	McFetridge, L. C.	Atlanta	R. D
Booth, A. D.	Noblesville	R. D	Newby, J. C.	Sheridan	R. D
Cottingham, Chas.	Noblesville	R. D	Nolder, S. M.	Sheridan	N. R. —
Cook, C. W.	Carmel	P.-M. D	Parr, Ed.	Jolietville	R. D
Davenport, H. E.	Sheridan	R. D	Parr, J. N.	Jolietville	R. D
Davenport, I. W.	Sheridan	R. D	Pettijohn, O. B.	Noblesville	R. D
Fodrea, Z. H.	Westfield	R. D	Ray, C. C.	Arcadia	R. D
Graham, W. B.	Noblesville	R. D	Rhodes, Anna	Atlanta	R. 10
Gray, J. M.	Noblesville	R. D	Ramer, B.	Cicero	R. D
Hicks, J. L.	Arcadia	R. D	Smith, T. J.	Noblesville	R. D
Hinshaw, F. M.	Westfield	R. D	Smith, H. B.	Ohio	R. D
Hershey, F. C.	Carmel	R. D	Stout, H. H.	Cicero	R. D
Herrel, S.	Noblesville	H. D	Shelburn, W. T.	Sheridan	R. D
Hayworth, M. C.	Noblesville	E. D	Tucker, A. R.	Noblesville	R. D
Hershey, K. C.	Carmel	R. D	Tomlinson, C. H.	Cicero	R. D
Herold, N. W.	Carmel	R. D	Teeter, G. N.	Boxley	N. R. —
Heath, J. P.	Fisher's Station R. D		Wells, I. E.	Eagletown	R. D
Herold, D. N.	Noblesville	P.-M. D	Warford, F. M.	Cicero	R. D
Johnson, M. S.	Eakin	N. R. —	Wilson, W. L.	Clarksville	P.-M. D
Kitchel, J. S.	Noblesville	H. 10	Wheeler, M. M.	Noblesville	P.-M. D
Lamb, E.	Noblesville	R. D	Wilmoth, C. S.	Noblesville	P.-M. D
LOEHR, E. C.	Noblesville	R. D	Wilson, Hattie	Clarksville	P.-M. D
Lyle, A. W. T.	Fisher's Station R. D		Utz, S. S.	Omega	R. D
Mendenhall, C. W.	Carmel	R. D	Utz, —	Arcadia	R. D
Miller, H.	Atlanta	N. R. —			

Regulars, 43; Homeopathic, 2; Physio-Medical, 7; not reported, 5. Total, 57.

Hancock County.

Adams, M. M.	Greenfield	R. D	Hanna, R. L.	Warrington	R. D
Alford, Chas. H.	Fortville	R. D	Hervey, T. P.	Fortville	R. D
Andrews, J. O.	Westland	R. 10	Hervey, S. W.	McCordsville	R. D
Boots, S. S.	Greenfield	E. D	Julian, J. W.	Wilkinson	P.-M. D
Bogart, H. J.	Greenfield	R. D	Justice, W. A.	Eden	R. D
Bruner, Mary L.	Greenfield	R. D	JUSTICE, J. H.	Greenfield	R. D
Bruner, C. K.	Greenfield	R. D	Johnson, W. R.	Charlottesville	R. D
Barnes, C. A.	Greenfield	R. D	King, W. R.	Greenfield	R. D
Brebuyer, John	New Palestine	R. D	Kirkhoff, C. H.	New Palestine	R. D
Black, J. P.	Greenfield	R. D	Larimore, J. M.	Greenfield	R. D
Buchel, Jacob	New Palestine	R. 10	Lumnis, J. E.	Maxwell	R. D
Bell, John S.	Philadelphia	R. 10	Lockhead, J. M.	Greenfield	H. D
Cory, John D.	McCordsville	R. D	Nicholson, Jno. P.	Mohawk	R. D
Collins, O. A.	Mohawk	R. D	Nier, O. C.	New Palestine	R. D
Cook, Benj. H.	Wilkinson	R. D	Pratt, C. C.	Willow	R. D
Comstock, J. A.	Greenfield	R. D	Ramsey, R. B.	Greenfield	R. D
Cox, W. B.	Charlottesville	E. D	Smith, Edgar M.	Carlton	E. D
Dailey, G. W.	Charlottesville	E. D	Stuart, J. G.	Fortville	E. D
Ely, J. W.	New Palestine	R. D	Stuart, A. H.	Fortville	E. D
Ely, L. C.	New Palestine	R. D	Selman, J. W.	Greenfield	R. D
Fuller, Wm	Philadelphia	R. 10	Troy, S. A.	Fortville	R. D
Griffin, L. D.	Greenfield	R. D	Titus, Chas	Warrington	R. D
Howard, Noble P., Jr.	Greenfield	R. D	Yancey, S. L.	Fortville	R. D
Hunt, A. T.	Westland	P.-M. D			

Regulars, 37; Eclectic, 7; Homeopathic, 1; Physio-Medical, 2. Total, 47.

Harrison County.

Best, Daniel	Mauckport	R. 10	Martin, Geo. F.	Corydon	R. D
Baston, Charles H.	Bradford	P.-M. D	Moore, William	Elizabeth	R. D
Cauder	Laconia	—	Neely, I. L.	Corydon	R. D
Deen, Henry K.	Central	R. D	Reader, William	New Amsterdam	R. D
Denba, William R.	Mauckport	R. 10	Swearns, John	DePauw	R. D
Daniel, Wm.	Corydon	R. D	Siegler, R. R.	Ramsey	R. D
Fouts, Clint.	New Sailsbury	R. D	Smith, Alva E.	Mauckport	R. D
Forbis, Burrel	Laconia	R. D	Scott, —	Lanesville	—
Finley, J. F.	Palmyra	R. 3	Shunk, —	Moberly	—
FUNK, Z. F.	Corydon	R. D	Winders, S. C.	Elizabeth	R. 10
Hurst, Stephen	Laconia	R. D	Weddell, J. D.	Elizabeth	R. D
Hoys, D. W.	Valley City	R. D	Wolpert, William I.	Elizabeth	R. 10
Horne, J. S.	Lanesville	R. 10	Wolfe, L. P.	Mauckport	R. D
Jones, A. M.	Corydon	R. D	Wolfe, Clifton	Lanesville	R. D
LaFollette, Wm. P.	Matt's Station	R. D			

Regular, 25; Physio-Medical, 1; not reported, 3. Total, 29.

Hendricks County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Adams, Thomas J . . .	North Salem . . .	R. D	Hill, H. C.	Danville	R. D
Bartholomew, B . . .	Danville	R. D	Johnson, Oscar B . .	Lizton	R. D
Barker, Joel T	Danville	R. D	Jessup, Maria Allen .	Friendswood . . .	R. D
Brill, James H	Pittsboro	R. D	Lawson, Wilson T . .	Danville	R. D
Brent, I. N	Pittsboro	R. D	Marsh, John L	Brownsburg . . .	E. D
Brook, M. W	Hazelwood	R. 3	Martin, W. N. G . . .	Brownsburg . . .	R. D
Carter, Amos	Plainfield	R. D	Martin, Simeon . . .	North Salem . .	R. D
Davidson, Albert W .	Brownsburg	R. D	Manners, J. L	Cartersburg . . .	R. D
Dryden, Thomas F . .	Clayton	R. D	Masters, N. G	Stilesville	R. D
Farabee, C. E.	Danville	R. D	Osborn, John A . . .	New Winchester .	R. D
French, John S	Pittsboro	R. D	Obrien, W. M	Stilesville	R. D
Green, J. N	Stilesville	R. D	Parker, M. G	Danville	R. D
Gilbert, A. K	Clayton	R. D	Robins, William . . .	North Salem . .	R. D
Harvey, William D . .	Plainfield	R. D	Reagan, Jesse	Plainfield	R. D
Harvey, William F . .	Plainfield	R. D	Ragan, John S	Plainfield	R. D
HOADLEY, W. J	Danville	R. D	Summers, H. C . . .	Amo	R. D
Heavenridge, A	Stilesville	R. D	Strong, Asa M	Belleville	R. D
Hunt, Stephen	Coatsville	R. D	Seaton, Grafton W . .	Clayton	R. D
Hunt, Tillman	Plainfield	R. D	White, Charles A . . .	Danville	R. D
Huron, Frank H . . .	Danville	H. D	White, William H . .	Amo	R. D
Hill, H. B	Danville	R. D			

Regular, 39; Eclectic, 1; Homeopathic, 1. Total, 41.

Henry County.

Barrett, O. H	Knightstown . . .	R. D	Mendenhall, E. T . .	New Castle	R. D
Bailey, G. D	Spicecland	R. D	McGovern, Wm. B . .	Knightstown . . .	R. D
Burke, Geo. W	New Castle	R. D	McKilup, James . . .	Snyder	R. 10
Boor, Wm. F	New Castle	R. D	McShirley, James L .	Sulphur Springs .	R. D
Benedict, Hanford . .	Springport	R. D	Newby, Zimri	Greensboro . . .	R. 10
Bartlett, C. G	Lewisville	R. D	Newhouse, J. T . . .	Sulphur Spr'gs . .	P.-M. 3
Bartlett, C. A	New Castle	R. D	Olden, W. C	Grant City	R. 10
Bufkins, Ezra	New Castle	P.-M. D	Pierce, James E . . .	Middletown . . .	R. —
Baldwin, Lawrence . .	Mooreland	R. D	Pickering, Samuel . .	New Lisbon	R. D
Ballard, Amos	New Lisbon	R. D	Pendleton, C. B . . .	Mechanicsb'rg . .	P.-M. D
Crouse, Henry M . . .	Knightstown . . .	R. D	Post, B. O	Sulphur Springs .	R. D
Cress, John B	Knightstown . . .	R. D	Painter, Berry	Middletown . . .	P.-M. D
Drake, F. J	Knightstown . . .	R. D	Redding, Jacob . . .	New Castle	P.-M. D
Doremus, Guy D . . .	Mooreland	R. D	Rawlins, F. J. P . . .	Elizabeth City . .	R. D
Englereth, J. F . . .	Honey Creek . . .	P.-M. —	Rea, John	New Castle	R. D
Estabrook, L. W . . .	Springport	R. D	Rogers, S. G	New Castle	R. D
Ferris, Samuel	New Castle	R. 10	Stanley, J. C	Kennard	R. 10
Ferris, E. S	New Castle	R. D	Smith, R. A	Greensboro . . .	P.-M. D
Fisher, John M	Middletown . . .	R. D	Smith, Mary J	Greensboro . . .	P.-M. 10
Greist, H. W	Kennard	R. D	Stafford, J. A	Millville	P.-M. D
GRONENDYKE, T. W .	New Castle	R. 10	Stafford, Daniel . . .	New Castle	P.-M. D
Gronendyke, O. E . . .	New Castle	R. D	Stafford, Horace . . .	Straughn	P.-M. D
Griffis, Robert	Middletown . . .	R. D	Stout, C. M	Middletown . . .	P.-M. D
Guyer, O. K	Lewisville	R. D	Seward, Clyde P . . .	Greensboro	R. D
Garrett, O. H	Cadiz	R. D	Thornburgh, F. L . .	Middletown . . .	R. D
Graf, O. O	Knightstown . . .	R. D	Thompson, J. F . . .	New Castle	H. D
Goodwin, Edward W .	Mt. Summit	R. D	Wallage, Geo. W . . .	Middletown . . .	R. D
Hess, Frank	Cadiz	R. D	Waters, S. C	Middletown . . .	R. D
Hollinger, I. U	Blountsville . . .	R. D	Wayman, J. C	New Castle	P.-M. D
Holloway, O. E	Knightstown . . .	R. D	Weeks, Joseph	Mechanicsb'rg . .	P.-M. D
Hardesty, J. C	Millville	R. D	Winston, L. V	Knightstown . . .	R. D
Hobbs, O. W	Knightstown . . .	R. D	White, J. A	Dunreith	R. D
Johnson, E. M	Knightstown . . .	R. D	Weeks, Elizabeth . . .	Mechanicsb'rg . .	P.-M. D
Kissell, Wm	New Castle	R. 10	Yockey, David H . . .	Blountsville . . .	R. D
Kirk, E. E	Spicecland	R. D	VanMatre, C. E . . .	New Castle	R. D
Moore, N. Lorella . .	New Castle	H. D			

Regular, 51; Homeopathic, 2; Eclectic, 2; Physio-Medical, 15; not reported, 1. Total, 71.

Howard County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Bates, A. J.	Kokomo	R. D	Miller, L. E.	Alto	R. D
Cooper, I. A.	Kokomo	E. D	Mill, H. C.	Greentown	R. D
Cox, Edgar	Kokomo	R. D	Moore, J. B.	Kokomo	R. D
Cooper, Wm.	Kokomo	E. D	McClung, W. H.	Kokomo	R. D
Friermood, E.	Greentown	R. D	Newlin, W. H.	New London	E. D
Flora, S.	Russiaville	E. D	Newlin, S.	Russiaville	E. D
Garr, J. O.	Kokomo	R. D	Oiler, L.	Russiaville	E. D
Gifford, T. V.	Kokomo	— 10	Rice, E. C.	Oakford	E. D
Holcombe, D.	Kokomo	H. D	Ross, R. H.	Cassville	R. D
Hull, W. H.	Center	R. D	Ross, J. H.	Kokomo	R. D
Hunter, T.	Kokomo	— 10	SMITH, R. H.	Kokomo	R. D
Knepple, L. M.	Kokomo	R. D	Scott, Wm	Kokomo	R. D
Kern, L.	Kokomo	R. D	Scott, G. D.	Greentown	R. D
Kirkpatrick, Y. B.	Kokomo	R. D	Thomas, H. A.	Kokomo	E. D
Kemp, G. N.	Russiaville	R. 3	Wright, J. C.	Kokomo	R. D
Martin, W. H.	Kokomo	R. D	Ware, C. W.	West Liberty	R. D
Moulder, J. M.	Kokomo	R. D			

Regular, 23; Eclectic, 7; Homeopathic, 1; not reported, 2. Total, 33.

Huntington County.

Beck, Wm. R.	Huntington	R. D	Koontz, S.	Roanoke	R. D
Bonifield, W. D.	Warren	R. D	Kilander, W. J.	Markle	R. D
Bucher, J. C.	Andrews	R. D	Loughbridge, —	River	R. D
Biggenstaff	Bippus	R. D	Lyons, I. E.	Huntington	R. D
Crandle, Thomas.	Majonica	E. D	Lyons, W. B.	Huntington	R. D
Cory, H. W.	Huntington	H. D	Leyman, E. H.	Huntington	R. D
Carson, W. F.	Huntington	R. D	Leyman, D. S.	Huntington	R. D
Chaffee, W. C.	Huntington	R. D	Misener, H. E.	Bracken	R. D
Chenoweth, Geo. F.	Mt. Etna	R. D	Murray, E. L.	Huntington	R. D
Derbyshire, S. J.	Warren	R. D	Michell, S. P.	Mt. Etna	R. D
Derbyshire, Luella	Warren	R. D	Mackey, J. L.	Warren	H. D
Edging, B. F.	Plum Tree	P. M. D	McLin, G. H.	Huntington	H. D
Frost, D. Fred	Huntington	R. D	Nichols, —	Monument City	R. D
Fisher, E. S.	Markle	R. D	Palmer, E. M.	Warren	R. D
Fish, W. S.	Hoboken	E. D	Sprowl, John S.	Warren	R. D
Frazier, F. M.	Warren	R. D	Se-ott, N. W.	Huntington	R. D
Gordon, B. F.	Bippus	R. D	Schaffer, A. H.	Huntington	R. D
Good, Chas. H.	Warren	R. D	Searles, J. D.	Huntington	R. 10
Grayston, F. S. C.	Huntington	R. D	Wells, H. M.	Andrews	R. D
Grayston, B. H. B.	Huntington	R. D	Wall, F. M.	Warren	R. D
Grayston, Chas. E.	Huntington	R. D	Wallace, Leroy	Hoboken	R. D
Grayston, Fred.	Huntington	R. D	Williams, O. B.	Andrews	R. 10
Gemmill, Henry C.	Markle	R. D	WRIGHT, CHAS. L.	Huntington	R. D
Hicks, J. M.	Huntington	H. D	Wright, Irvin	Huntington	R. D
Howland, M.	Majonica	R. D	Ying ing, Daniel	Huntington	E. D
Kemp, Jas. W.	Roanoke	R. D	Young, Ed L.	Pleasant Pl'n. N. R. 10	
King, J. B.	Roanoke	R. D			

Regular, 44; Physio-Medical, 1; Eclectic, 3; Homeopathic, 4; not reported 1. Total, 53.

Jackson County.

Brown, F. W.	Seymour	R. D	Monroe, V. H.	Seymour	R. 10
Barnes, Geo. O.	Courtland	R. D	Osterman, A. G.	Dudleytown	R. 10
Bard, Thos. S.	Crothersville	R. D	Orvis, G. Q.	Seymour	R. D
Cummings, H. A.	Mooney	R. 3	Paxton, James C.	Medora	R. D
Cummings, D. J.	Houston	R. D	Patrick, Chas. E.	Seymour	R. D
Charlton, S. H.	Seymour	R. 10	Pipes, —	Cortland	R. —
Casey, Wm. M.	Seymour	R. D	Reed, E. C.	Ewing	R. 10
Chute, Geo. H.	Freetown	P. M. 10	Richards, Thos. J.	Mooney	R. 10
Converse, E. A.	Brownstown	E. D	Ruddick, L.	Seymour	R. D
Drybrough, Andrew	Crothersville	R. 10	Ritter, J. K.	Brownstown	R. D
Ewing, F. M.	Vallonia	R. 10	Shields, James M.	Seymour	R. D
Garrish, F. M.	Seymour	R. D	Shields, J. T.	Seymour	R. D
Grasile, G. G.	Seymour	H. D	Shipman, N. N.	Seymour	R. D
GREEN, JAS. H.	Seymour	R. D	Shoemaker, E.	Seymour	R. 10
Gibson, Geo. W.	Houston	R. 10	Tinch, E. T.	Freetown	R. D
Green, W. O.	Dudleytown	R. D	Veazey, A. M.	Medora	R. D
Hunter, Charles A.	Redding	P. M. D	Wilson, M. V.	Medora	R. 10
Kyte, H. R.	Seymour	P. M. D	Whitehead, W. E.	Brownstown	R. D
May, Albert	Crothersville	R. D	Whitted, —	Courtland	R. D
Mitchell, Edward	Vallonia	R. D	Warner, W. H.	Crothersville	R. D
McCormick, L. R.	Crothersville	R. D	Wilson, C. L.	Ewing	R. D
McMillian, Jas. P.	Medora	R. 10	Yost, H. E.	Tampico	R. D
Manual, G.	Freetown	R. 10	Zaring, P. A.	Tampico	R. D

Regular, 41; Physio-Medical, 3; Eclectic, 1. Total, 45.

Jasper County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
ALTER, M. B.	Rensselaer	R. 3	Landon, H.	Remington	R. D
Berkley, —	Rensselaer	R. D	Pothouse, P. J. . . .	Remington	R. D
Hartsell, W. W. . . .	Rensselaer	R. D	Ramsey, John P. . . .	Remington	R. D
Jones, C. V.	Kinman	R. D	Wells, Lonis N. . . .	Demott	K. 10
Loughridge, V. E. . .	Rensselaer	R. D	Washburn, J. B. . . .	Rensselaer	R. D

Regular, 9; Homeopathic, 1. Total, 10.

Jay County.

Arthur, C. S.	Portland	R. 3	Mackey, C. W.	Portland	R. D
Bosworth, J. M. . . .	Pennville	R. D	Miles, J. T.	Bryant	R. D
Blacklege, L. N. . . .	Pennville	E. D	McFarland, N. M. . . .	New Pittsburg . . .	E. D
Blacklege, Mrs. A. J. .	Pennville	E. D	McKinsey, W. M. . . .	Redkey	P.-M. D
Bramlege, Clemens. .	New Corydon	R. D	Minton, W. A.	Dunkirk	R. D
Brown, H. V.	Portland	R. D	Mincks, F. W.	Portland	H. 3
Clevenger, B. J. . . .	Redkey	R. D	Poling, S. K.	Portland	E. D
Conner, N. F.	Redkey	R. D	Ralston, Augustus . . .	New Corydon	R. D
Davis, R. P.	Portland	R. D	Ross, John G.	Portland	E. D
Dickes, J. T.	Portland	R. D	Rarick, I. N.	Bluff Point	P.-M. D
Edson, C. C.	Dunkirk	E. D	Stiers, F. R.	Redkey	E. D
Fertich, G. W.	Dunkirk	R. D	Salisbury, M. A. . . .	Salamonie	R. D
Fitzpatrick, J. D. . .	Dunkirk	R. 10	Stanton, D. S.	Portland	R. 10
Glentzer, M. A. . . .	Bryant	E. 10	Selvey, S. S.	Dunkirk	R. 10
Goetz, Katie A. . . .	Portland	P.-M. D	Shepherd, G. W. . . .	Redkey	R. 10
Grey, Samuel.	Bryant	N. R. 10	Saunders, J. E.	Pennville	P.-M. D
Garber, J. B.	Dunkirk	R. D	Smith, Wm	Portland	N. R. 10
Hall, J. W.	Portland	R. D	Saunders, C. B. . . .	Pennville	P.-M. D
Hall, W. M.	Westchester	R. D	Sims, I. G.	Portland	R. D
Horn, W. C.	Pennville	R. D	Schwartz, W. H. . . .	Redkey	P.-M. D
Hutchens, W. C. . . .	Portland	P.-M. 10	Sage, Ira T.	Redkey	E. D
Hutchinson, J. A. . .	Salamonie	R. D	Skinner, D. T.	Salamonie	E. D
JAY, MILTON T. . . .	Portland	R. D	Thomas, S. A.	Salamonie	E. 10
Kinsey, D. S.	Portland	R. D	Thomas, E. R.	Salamonie	P.-M. D
Kidder, J. F.	New Mt. Pleasant . .	R. 10	Thomas, E. O.	Salamonie	P.-M. D
Little, J. S.	Dunkirk	H. D	Vail, I. W.	Portland	E. D
Murry, D. P.	Dunkirk	R. D	Van Nuy, D. H. . . .	Portland	R. D
Morehouse, J. A. . . .	Portland	P.-M. D	White, J. K.	Boundary	R. D
Munsey, S. E.	New Mt. Pleasant . .	R. 10	White, T. C.	Powers	R. 10
Mason, Samuel	Pennville	R. D	Young, Frank	Dunkirk	E. D

Regular, 33; Eclectic, 13; Physio-Medical, 10; Homeopathic, 1; not reported, 2. Total, 59.

Jefferson County.

Bringle, J. S.	Hanover	R. D	Lewis, Geo.	Madison	R. D
Burdsal, Chas.	Lancaster	R. 3	Lewis, J. F.	Dupont	R. D
Christie, J. H.	Canaan	R. D	Lewis, G. B.	Dupont	R. D
Cooperider, J.	Madison	R. D	LEWIS, MOLLIE	Madison	R. D
Cornet, W. F. S. . . .	Madison	R. D	Mathews, J. H.	Madison	R. D
Copeland, C. C. . . .	North Madison	R. D	Mathews, Char.	Kent	R. D
Cohen, Morris	Madison	R. D	Muret, Jas.	Madison	R. D
Davidson, W. R. . . .	Madison	R. D	McCarthy, W. W. . . .	Canaan	R. D
Denny, Chas.	Bryantsburg	R. D	McCoy, Wm. A.	Madison	R. D
Deputy, S. R.	Kent	R. D	Penn, Benj.	Bryantsburg	E. D
Dixon, Z. C.	Deputy	R. D	Rawlings, J. V. . . .	Wirt	R. D
Ford, S. M.	Madison	R. D	Reynolds, J. H. . . .	Madison	R. D
Flanders, J. W. . . .	Dupont	R. D	Ryker, Chas.	Manville	R. D
Freeman, Wm.	Madison	R. D	Robertson, David . . .	Deputy	R. D
Forshee, Thos.	Madison	R. D	Sanderson, Thos. . . .	Madison	R. 10
Hatch, H. S.	Madison	H. D	Shutterly, W. R. . . .	Bryantsburg	R. D
Hutchinson, Jos. . . .	Madison	H. D	Swan, T. C.	Hanover	R. D
Hutchings, W. R. . . .	Madison	R. D	Stewart, Geo. A. . . .	Brooksbury	R. D
Johnson, A. H.	Chilson	R. D	Tevis, R. M.	Brooksbury	R. D
Julian, Paris	Swanville	N. R. 10	Tevis, E. R.	Brooksbury	R. D
Lewis, S. B.	Canaan	R. D	Townsend, S. M. . . .	Madison	R. D

Regular, 38; Homeopathics, 2; Eclectics, 1; not reported, 1. Total, 42.

Jennings County.

<i>Names.</i>	<i>Postoffice</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Adams, S. D	Brewersville . .	R. 10	Light, A. B.	North Vernon . .	R. D
Amick, C. C.	Hayden	R. D	Mitchell, J. W. . . .	North Vernon . .	R. D
Cox, J. G.	Nebraska.	R. D	Nichswander, M. . . .	Hayden.	R. D
Fall, W. R.	North Vernon . .	R. D	Nelson, H. G.	Vernon	R. D
Gaddy, N. D.	Lovett	R. D	Phillips, C. W.	Scipio	R. D
Gaddy, O.	Paris Crossing . .	R. D	Richardson, N.	Vernon	R. 10
Green, J. H.	North Vernon . .	R. D	Richardson, W. H. . .	Vernon	R. D
HANNA, I. L.	Paris Crossing . .	R. D	Stemm, W. H.	North Vernon . .	R. D
Kendrick, N. C. . . .	Butlerville	R. 10	Wildman, W. A. . . .	San Jacinto . . .	R. D

Regular, 18. Total, 18.

Johnson County.

Avary, W. B.	Nineveh	R. D	Mathews, Accie E. . .	Franklin	R. D
Abbott, W. R.	Greenwood	R. D	Middleton, J. T. . . .	Nineveh	R. D
Adams, J. H.	Amity	R. 10	Noble, Thomas B. . . .	Greenwood	R. 10
Beebe, James	Whiteland	R. D	Ott, L. E.	Franklin	R. D
Bland, John A. . . .	Edinburg.	R. D	Phipps, H. T.	Whiteland	R. D
Bvers, R. S.	Trafalgar.	R. D	Phipps, I. H.	Needham	R. D
Craig, J. A.	Greenwood	R. D	Payne, P. W.	Franklin	R. D
Carnes, Zach	Greenwood	R. D	Payne, C. F.	Franklin	R. D
Cupp, M. F.	Edinburg.	R. D	Provence, W. M. . . .	Providence. . . .	R. D
Donnell, T. C.	Franklin	R. D	Provence, C.	Providence. . . .	R. D
Dobyns, T. R.	Franklin	R. D	Rush, W. P.	Edinburg.	R. D
Davis, A. T.	Edinburg.	R. 10	Reeves, J. B.	Nineveh	R. D
Freeman, T. C.	Franklin	R. D	Surface, O. B.	Stones Crossing . .	R. D
Gillesby, F. P. . . .	Smith Valley. . . .	R. D	Truster, J. G.	Barzersville . . .	R. D
HALL, W. C.	Franklin	R. D	Terhune, W.	Whiteland	R. D
Hall, H. J.	Franklin	R. D	Wood, J. C.	Franklin	R. D
Hibbs, Irwin	Nineveh	R. 10	Whitesides, L. L. . .	Franklin	R. D
Howe, R. M.	Edinburg.	R. D	Wallace, B.	Franklin	R. D
Jones, J. T.	Franklin	R. D	Wishard, J. M.	Greenwood	R. D
Kegley, J. L.	Stones Crossing . .	R. 3	Wellen, R. Day. . . .	Trafalgar	R. D
Lanam, —.	Edinburg.	R. D	Wright, A. F.	Nineveh	R. D
Miller, A.	Whiteland	R. D	Wadsworth, Chas. . .	Rocklane.	R. D
Miller, D. H.	Franklin	R. D	Wellen, E. B.	Morgantown . . .	R. D

Regular, 43; Eclectic, 2; Homeopathic, 1. Total, 46.

Knox County.

Alexander, James F. .	Bruceville	R. D	Lytton, Jefferson . .	Wheatland	R. 3
Beard, Schuyler C. .	Vincennes	R. D	Mayfield, Geo. W. . .	Bruceville	R. D
Beckes, Lyman M. . .	Vincennes	R. D	McDowell, J. M. . . .	Bruceville	R. D
Benham, C. W. . . .	Vincennes	R. D	McDowell, L. C. . . .	Freelandville . . .	R. D
Bever, John C. . . .	Vincennes	P-M 3	McGauhy, A. J. . . .	Freelandville . . .	R. D
Bever, Almira C. W. .	Vincennes	E. D	Meyer, H. W. H. . . .	Freelandville . . .	R. 10
Beeson, Mary H. . .	Vincennes	P-M. C	Merritt, J. N.	Oaktown	R. 3
Black, Elijah C. . . .	Wheatland	R. 3	Martin, F. M.	Beal P.O.	R. 20
Barnett, John H. . .	Monroe City	R. D	Moore, M. G.	Vincennes	R. D
Cross, John F.	Vincennes	R. 3	Moore, R. G.	Vincennes	R. D
Caney, P. H.	Vincennes	R. D	McDowell, M. M. . . .	Vincennes	R. D
Cullop, James A. . .	Sandborn	R. D	McDowell, J. D. . . .	Vincennes	R. D
Davis, Royse	Decker	R. D	Pickel, J. M.	Bicknell	R. D
Dukate, John S. . . .	Monroe City	R. D	Reeves, J. L.	Edwardsport . . .	R. D
Davenport, Wm. H. .	Vincennes	R. D	Ray, J. W.	Emison	P-M. D
Dukate, John B. D. .	Vincennes	R. 10	SWARTZEL, J. A. . . .	Vincennes	R. D
Edmonson, G. W. . .	Monroe City	R. D	Smith, H. M.	Vincennes	R. D
Grigsby, W. B. . . .	Oaktown	R. D	Smith, W. F.	Vincennes	E. D
Harris, F. M.	Vincennes	R. D	Smith, J. H.	Bicknell	R. 10
Hensly, J. H.	Vincennes	R. D	Staley, L. B.	Bicknell	R. D
Harrison, S. L. . . .	Vincennes	R. D	Spaulding, G. L. . . .	Sandborn	R. D
Hall, Silas	Vincennes	R. D	Shirts, Elmer	Sandborn	R. D
Helt, Henry	Vincennes	H. D	Sprinkle, W. B. . . .	Oaktown	R. D
Holloway, J. C. . . .	Vincennes	R. D	Somes, J. F.	Vincennes	R. D
Jessup, R. B.	Vincennes	R. D	Trout, R. E.	Oaktown	R. D
Jones, W. R.	Bicknell	R. D	Trueblood, J. W. . . .	Monroe City . . .	R. 3
Knapp, Geo.	Vincennes	R. D	Von Trees, E. L. . . .	Monroe City . . .	R. D
Keith, Benj. F. . . .	Edwardsport . . .	R. D	Williams, J. T.	Monroe City . . .	E. D
Kessenger, W. E. . .	Sandborn	R. D			

Regular, 50; Eclectic, 3; Homeopathic, 1; Physio-Medical, 3. Total, 57.

Kosciusko County.

Names.	Postoffice.	School.	Names.	Postoffice.	School.
Amiss, James M.	Silver Lake	R. D	Leach, Thomas J.	Warsaw	P-M. D
Byler, Joseph M.	Clunette	H. D	Lyon, James H.	Leesburg	R. D
Bennett, H. E.	Mentone	R. D	McDonnald, R. C.	Warsaw	R. D
Bowser, John M.	Syracuse	R. D	McElrath, M. F.	Etna Green	R. 3
Bash, J. M.	Warsaw	R. D	Misner, Henry F.	Sidney	P-M. D
Burkett, Cal. W.	Warsaw	R. D	Moro, Frances	Warsaw	E. D
Burkett, Benj. S.	Warsaw	R. D	Moody, Theo. F.	Piercetown	R. D
Boydston, Benj. S.	Atwood	R. D	Parks, John P.	Atwood	R. D
Becknill, I. J.	Milford	R. D	Pearman, Francis M.	Palestine	R. D
Chandler, Joseph A.	Warsaw	R. 10	Potter, J. E.	Milford	R. D
Clayton, Calvin M.	Warsaw	— 10	Robinson, Sarah A.	Warsaw	E. 10
Cammack, Calvin M.	Milford	R. D	Spooner, Henry M.	Warsaw	H. D
Dick, Milford L.	Piercetown	P-M. D	Snodgrass, Samuel L.	Burkett	P-M. D
Fermier, P. G.	Leesburg	B. D	Swyhart, Anna	Warsaw	P-M. D
Hazel, John B.	Etna Green	R. D	Schoonover, W. R.	Warsaw	R. D
Hedder, John W.	Mentone	E. D	Smith, James S.	Warsaw	P-M. D
Hatfield, Thomas J.	Piercetown	— 10	Scott, Wm.	Piercetown	R. 10
Hatfield, W. J.	North Webster	R. D	SHACKELFORD, T. J.	Warsaw	R. D
Junkens, S. B.	North Webster	— 10	Stockberger, E.	Mentone	R. 3
Johnson, A. R.	Piercetown	H. 10	Terry, Percy E.	Silver Lake	R. 3
Jones, C. A.	Leesburg	P-M. D	Tennant, L. H.	Sidney	— 10
Kins, H. O.	Piercetown	R. D	Webb, Amos	Warsaw	R. D
Keen, Levi	Milford	H. 10	Webber, Irvin	Warsaw	— 10
Ketcham, G. V.	Claypool	R. D	White, R. P.	Warsaw	R. D
Keplinger, Wm.	Burkett	— 10	White, S. G.	Warsaw	R. D
Love, J. W.	Milwood	— 10	Woody, Frank F.	Warsaw	P-M. D
Leech, R. V.	Oswego	R. D	Warwell, Joseph L.	Sidney	H. D
Liter, W. S.	Claypool	R. D	Yocum, M. G.	Mentone	E. D
Long, Chas. R.	Piercetown	R. D			

Regular, 32; Physio-Medical, 7; Homeopathic, 5; Eclectic, 4; not reported, 6 Total, 54.

Lagrange County.

Broughton, Forbes H.	Wolcottville	R. D	Newnam, H. M.	South Milford	R. D
Dancer, John	South Milford	R. D	Raby, William	Wolcottville	E. 10
Dayton, George H.	Lima	R. D	Short, Wm. H.	Lagrange	R. D
Deary, John N.	Topeka	R. 5	Short, John L.	Lagrange	R. D
Dryer, D. M.	Lagrange	R. D	Schrock, Henry W.	Lagrange	R. D
Eash, Samuel W.	Shipshewana	R. D	Schrock, Jos. J.	Emma	R. D
Enzle, Jacob B.	Lagrange	R. 10	Thompson, O. K.	Lagrange	H. D
Ferguson, Wm. A.	Brighton	R. D	Toms, Alpheus	Scott	R. D
GRIFFITH, F. P.	Lagrange	R. D	Vaughan, Iris J.	Topeka	R. D
Grubb, A. G.	Mongo	R. D	Wallace, Wm. B.	Lima	R. D
Hosrell, A. S.	Shipshewana	R. D	White, E. G.	Lagrange	R. D
Hughes, William	Lima	R. D	Wyatt, A. R.	Lagrange	R. D
Kester, A. A.	Wolcottville	H. 10	Yorgkie, J. W.	Wolcottville	R. 10
Moak, A. S.	Scott	E. D			

Regular, 23; Eclectic, 2; Homeopathic, 2. Total, 27.

Lake County.

Allen, A. D.	Hammond	R. D	Lauer, A. J.	Whiting	E. D
Bacon, E. R.	Lowell	R. D	Miller, F. S. C.	Hobart	R. D
Blackstone, J. K.	Crown Point	R. D	Mackey, R. C.	Hobart	E. D
BLACKSTONE, W. B.	Crown Point	R. D	Merrill, W. W.	Hobart	E. D
Bliss, M. G.	Crown Point	E. D	Neff, O. S.	Hammond	H. D
Ball, Herbert	Crown Point	E. D	Patterson, A. J.	East Chicago	R. —
Brannon, G. D.	Crown Point	R. D	Pratt, S. R.	Crown Point	R. D
Brown, H. M.	East Chicago	R. D	Pettibone, Henry	Crown Point	R. D
Cole, T. J.		R. D	Pettibone, Harvey	Crown Point	R. 10
Davis, J. E.	Lowell	R. D	Phillips, A. J.	Lowell	*Sp.
Disbrow, E. D.	Hammond	R. D	Putnam, W. E.	Whiting	R. D
Gibbs, J. C.	Crown Point	H. D	Pannenberg, J. C.	Hammond	R. D
Gerrish, A. A.	Lowell	R. D	Quiner, W. C.	Lowell	E. D
Gordon, P. P.	Lowell	R. D	Ruckle, J. F.	Hammond	H. D
Groman, Charles	Brunswick	H. 10	Seidler, A.	Dyer	R. D
Howat, F. W.	Hammond	R. D	Street, A. W.	Whiting	R. D
Hill, J. L.	Creston	R. D	Sang, Don	Crown Point	†Con.
Higgins, John	Crown Point	R. D	Swartz, H. P.	Crown Point	R. 10
Houston, D. P.	Dyer	R. D	Sharer, H. E.	Hammond	R. D
Iback, P. G.	Hammond	R. D	Take, J. F.	Whiting	E. D
Iddings, H. L.	Merrillville	R. D	Van de Walker	Hammond	E. 10
Jackson, Mary	Hammond	P-M. D	Van de Werth, Otto	Hammond	N. G
Jackson, L. D.	Hammond	P-M. D	Watson, J. C.	Hobart	R. D
Johnson, E. C.	Hammond	R. D	Wilcox, Helen	Hammond	H. D

Regular, 23; Eclectic, 9; Homeopathic, 5; Physio-Medical, 2; not reported, 1; *Spiritualist, 1; †Confucian, 1. Total, 45.

Laporte County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Annis, E. L.	Laporte.	R. D	Long, H. H.	Kingsbury	R. D
Armstrong, S. G. . . .	Laporte.	R. D	Leeson, G. M.	Wanatah	R. D
Brown, D. T.	Michigan City . . .	R. D	Mullen, A. J.	Michigan City . . .	R. D
Bowell, B. C.	Rolling Prairie. E. D		Meyers, J. H. Wm . . .	Laporte.	R. D
Bowman, Wm.	Wanatah	R. 10	Martin, J. S.	Rolling Prairie. R. 10	
Blinks, E. G.	Michigan City . . .	R. D	Martin, F. V.	Westville.	H. D
Cole, E. Z.	Michigan City . . .	H. D	Modrack, J. C.	Laporte.	R. D
Callahan, E. J.	Otis	R. D	McLean, Guy M.	Laporte.	R. D
Crawford, E. F. W. . .	Wellsboro	R. D	Pickering, C. R. . . .	Michigan City . . .	R. D
Darling, N. S.	Laporte.	R. D	Prindle, Beulah . . .	Laporte.	R. D
Dakin, G. M.	Laporte.	E. D	Rogers, E. A.	Laporte.	R. D
Ellsworth, H. N. . . .	Kingsbury	R. D	Rogers, Jesse B. . . .	Michigan City . . .	H. D
Eggleston, H. W. . . .	Laporte.	E. D	Short, R. B.	Union Mills	E. D
Fisher, W. H.	Wanatah	E. D	Sutherland, O. L. . . .	Laporte.	H. D
Fravel, T.	Westville	E. D	Tillotson, A. G.	Michigan City . . .	E. D
Fahnestock, C. S. . . .	Laporte.	H. D	Thayer, E. J.	Union Mills	R. D
Fahnestock, A. A. . . .	Laporte.	H. D	Whiting, S. G.	Laporte.	H. D
Godfrey, W. R.	Michigan City . . .	R. D	Wilson, H. W.	Michigan City . . .	R. D
Gray, J. L.	Laporte.	E. D	Wilcox, F. T.	Laporte.	R. D
Holloway, A. L.	Michigan City . . .	E. D	Walkinshaw, Wm . . .	Stillwell	R. D
Hollenbeck, B. W. . . .	Westville.	E. 3	Wardner, H.	Laporte.	R. D
Keene, L. S.	Laporte.	R. D			

Regular, 31; Homeopathic, 7; Eclectic, 5. Total, 43.

Lawrence County.

Allen, E. F.	Fayetteville . . .	R. 10	Kelley, J. C.	Mitchell	R. D
Allen, T. J.	Bedford	R. D	J. B. Larkin	Mitchell	R. D
Andrews, J. R.	River Vale	R. D	Louder, Cyrus	Popeorn	R. 3
Bose, A. W.	Bryantville	R. D	McDonald, A. J.	Bedford	R. D
Burton, G. W.	Mitchell	R. D	McIntire, E. S.	Mitchell	R. D
Butler, W. C.	Leesville	R. 3	Meadows, J.	Bartlettville . . .	R. 10
Berry, A. F.	River Vale	R. 3	Mitchell, E. E.	Avoca	R. D
Bynes, J. D.	Mitchell	R. D	Martin, R. E.	Heltonville	R. D
Donica, T. M.	Tunnelton	R. 10	McFarlan, J. T.	Williams	R. D
Dixon, H. C.	Tunnelton	R. D	McLaughlin, O.	Bartlettville . . .	R. 10
Luncan, J. B.	Bedford	R. —	Newland, J. W.	Bedford	R. D
Dings, W. H.	Huron	R. D	Phipps, J. M.	Bedford	R. D
Dierking, A. W.	Oelitic	R. D	Smith, W. H.	Bedford	R. 10
Ellison, W. T.	Heltonville	R. D	Smith, S. W.	Leesville	R. D
Emery, C. H.	Bedford	R. D	Short, W.	Springville	R. D
Faubion, J.	Heltonville	R. 10	Short, R. B.	Oelitic	R. D
Freeland, J. T.	Bedford	R. D	Stipp, F. E.	Bedford	R. D
Guan, J. H.	Springville	R. 10	Rariden, S. A.	Bedford	R. 10
HUNTER, F. S.	Bedford	R. D	Rariden, C. E.	Bedford	R. D
Hornocker, S. D.	Silverville	R. 10	Voyles, Harvey	Bedford	R. D
Heckman, W. H.	Bedford	H. D	Walls, Geo. W.	Mitchell	R. 10
Ketchem, J. D.	Tunnelton	R. D			

Regular, 42; Homeopathic, 1. Total, 43.

Madison County.

Atherton, R. M.	Anderson	H. D	Clark, W. P.	Elwood	R. D
Alexander, L. E.	Pendleton	R. D	CHITTENDEN, E. W. . .	Anderson	R. D
Armfield, J. D.	Elwood	R. D	Chittenden, Geo. F. . .	Anderson	R. D
Ardery, Oscar	Anderson	R. D	Cullen, John C.	Anderson	R. D
Alexander, Wm. S. . . .	Perkinsville	R. D	Cook, Ward	Pendleton	R. D
Armington, Chas. L. . .	Anderson	R. D	Cook, H. C.	Pendleton	R. D
Beetto, H. P.	Frankton	—	Clymer, D. H.	Elwood	R. 10
Branch, C. N.	Anderson	R. D	Cook, John W.	Pendleton	R. D
Brickley, W. P.	Anderson	P. M. D	Diven, Chas. E.	Anderson	R. D
Branch, C. N., Jr. . . .	Anderson	R. D	Downey, Samuel G. . .	Chesterfield. . . .	—
Bower, H. W.	Anderson	P. M. D	Davis, J. W.	Anderson	P. M. D
Brown, Martin	Summitville	R. D	Ebert, J. D.	Dundee	R. D
Broadbent, O.	Anderson	K. D	Edwins, S. W.	Elwood	R. D
Brownback, O. W. . . .	Pendleton	R. D	Eyer, Walter	Anderson	E. D
Charles, Etta	Summitville	—	French, J. W.	Frankton	R. D
Coverston, John W. . . .	Frankton	R. 10	Fairfield, Nellie W. . .	Anderson	R. D
Cook, Daniel	Fishersburg	R. D	Fairfield, W. J.	Anderson	R. D
Cranefteld, M. G.	Summitville	R. 10	Fussell, Lundy	Markleville	R. D

Madison County—Continued.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Fritz, Perry D . . .	Alexandria . . .	R. D	Newlin, S. C . . .	Anderson . . .	R. D
Faltiz, J. B. . . .	Anderson . . .	R. D	Nouse, S. P. . . .	Alexandria . . .	R. D
George, Walter R . .	Summitville . . .	—	Nuzum, D. P. . . .	Elwood . . .	E. 3
Gassett, N. W. W . .	Alexandria . . .	— D	Otto, A. E. . . .	Alexandria . . .	R. D
Gibson, John J. . . .	Alexandria . . .	R. D	Oreston, L. F. . . .	Anderson . . .	R. D
Garritson, Wm. M . .	Perkinsville . . .	R. D	Patton, Madge . . .	Alexandria . . .	R. D
Ginsinger, J. S. . . .	Florida . . .	R. 10	Peck, J. S. W. . . .	Frankton . . .	—
Garrett, N. M. W. . .	Alexandria . . .	R. D	Petro, P. M. . . .	Markleville . . .	R. 10
Huston, S. Anthony . .	Anderson . . .	P.-M. D	Perry, A. J. . . .	Alexandria . . .	R. D
Hunt, John W . . .	Anderson . . .	R. D	Perry, John W. . . .	Alexandria . . .	R. D
Harter, J. H. . . .	Anderson . . .	R. 3	Pugh, J. W., Jr. . . .	Alexandria . . .	H. D
Harter, Wm. P. . . .	Anderson . . .	R. 3	Pratt, Chas. C. . . .	Ovid . . .	R. D
Hilligass, G. N. . . .	Anderson . . .	R. 3	Runyan, Jas. F. . . .	Alexandria . . .	H. D
Hougham, J. S. . . .	Perkinsville . . .	R. 3	Stephens, J. H. . . .	Anderson . . .	E. D
Hodges, Fred J. . . .	Anderson . . .	R. D	Sullivan, H. . . .	Alexandria . . .	R. D
Hunt, M. V. . . .	Anderson . . .	R. D	Seigler, D. . . .	Elwood . . .	R. D
Horne, W. N. . . .	Anderson . . .	R. D	Stephenson, Joseph . .	Pendleton . . .	R. D
Hall, Joseph W . . .	Alexandria . . .	N. R.	Stewart, Jonas . . .	Anderson . . .	R. D
Hammond, J. H. . . .	Anderson . . .	H. D	Stone, F. L. . . .	Pendleton . . .	P.-M. D
Hoppenwrath, W. H. . .	Elwood . . .	N. R. D	Suman, Wm. . . .	Anderson . . .	R. D
Inlow, Jas. E. . . .	Summitville . . .	R. 10	Seigler, D. . . .	Elwood . . .	R. D
Johnson, J. H. . . .	Frankton . . .	—	Shaffer, A. R. . . .	Alexandria . . .	R. D
Jones, Horace E . . .	Anderson . . .	R. D	Sears, A. H. . . .	Anderson . . .	H. D
Jones, James M . . .	Lapel . . .	R. D	Struss, Louis M . . .	Alexandria . . .	R. D
Kneals, W. W. . . .	Anderson . . .	R. P	Scott, W. F. . . .	Florida . . .	P.-M. D
Keller, G. F. . . .	Alexandria . . .	R. D	Turner, Louis . . .	Elwood . . .	—
Little, J. M. . . .	Alexandria . . .	—	Tobias, A. W. . . .	Elwood . . .	—
Lial, John H. . . .	Ingalls . . .	—	Taylor, H. W. . . .	Anderson . . .	E. D
Little, B. F. . . .	Elwood . . .	H. D	Taylor, Elizabeth . . .	Anderson . . .	H. D
Lowman, J. O. . . .	Anderson . . .	P.-M. D	Troy, S. A. . . .	Fortville . . .	R. 10
Lewis, Walter H . . .	Pendleton . . .	R. D	Van Horne, C. B. . . .	Frankton . . .	R. D
McLaughlin, J. B . . .	Anderson . . .	—	Van Meetre, J. N. . . .	Florida . . .	R. D
Marley, H. H. . . .	Anderson . . .	—	Van Nuy, Wm. . . .	Anderson . . .	R. D
McTurenn, M. J. . . .	Independence . . .	R. D	Williams, L. O. . . .	Anderson . . .	—
Morgan, Wm. J. . . .	Gilman . . .	R. 10	Williams, H. D. . . .	Anderson . . .	P.-M. D
Moore, J. R. . . .	Lapel . . .	R. D	Weeks, Elizabeth . . .	Markleville . . .	P.-M. D
Miley, J. . . .	Anderson . . .	R. 10	Williams, Chas. F. . . .	Summitville . . .	R. D
Miller, Elizabeth . . .	Anderson . . .	R. D	Weeks, Joseph . . .	Mechanics'g. P. . .	P.-M. D
Mendenhall, Chas. C . .	Anderson . . .	N. R. D	Wilson, S. C. . . .	Anderson . . .	R. D
Morrison, S. O. . . .	Anderson . . .	P.-M. D	Wickersham, S. C. . . .	Anderson . . .	R. D
McNutt, C. F. . . .	Elwood . . .	R. D	White, Francis W. . . .	Summitville . . .	R. D
Miller, H. L. . . .	Alexandria . . .	N. R. —	White, John W. . . .	Summitville . . .	R. D
Messon, M. . . .	Anderson . . .	H. D	Walser, J. A. . . .	Anderson . . .	R. 10
Marshall, Mary E . . .	Anderson . . .	E. D	Williams, J. B. . . .	Anderson . . .	P.-M. D

Regular, 81; Eclectic, 5; Homeopathic, 8; Physio-Medical, 12; not reported, 18. Total, 124.

Marion County.

Allen Wesley. . . .	West Newton . . .	R. D	Beebinger, John . . .	Cumberland . . .	R. D
Allen, Horace R . . .	Indianapolis . . .	E. D	Bennett, H. M. . . .	Nora . . .	R. D
Allen, Horace R., Jr. . .	Indianapolis . . .	E. D	Beard, Elisha . . .	Indianapolis . . .	R. D
Allen, Wm. P . . .	Indianapolis . . .	P.-M. D	Bedford, Collins T . . .	Indianapolis . . .	P.-M. D
Abbett, Chas. H . . .	Indianapolis . . .	E. D	Bell, Guido . . .	Indianapolis . . .	R. D
Abbett, Francis M . . .	Indianapolis . . .	E. D	Bell, Leonard . . .	Indianapolis . . .	R. D
Alexander, Joseph C . . .	Indianapolis . . .	R. D	Bempe, John L. . . .	Indianapolis . . .	R. D
Adams, H. Alden . . .	Indianapolis . . .	H. D	Benham, John F. . . .	W. Indianapolis . . .	N. R.
Anderson, Don A . . .	Indianapolis . . .	N. R.	Beck, W. S. . . .	Indianapolis . . .	R. D
Anderson, James R . . .	Indianapolis . . .	N. R. D	Berauer, Joseph M . . .	Indianapolis . . .	R. D
Anthony, Emanuel . . .	Indianapolis . . .	P.-M. D	Brennan, E. J. . . .	Indianapolis . . .	R. D
Anthony, Grove E . . .	Indianapolis . . .	P.-M. D	Brayton, O. W. . . .	Indianapolis . . .	R. D
Anthony, James R . . .	Indianapolis . . .	R. D	Bigger, Richard F . . .	Indianapolis . . .	R. D
Armer, David S . . .	Indianapolis . . .	N. R.	Bigger, R. H. . . .	Indianapolis . . .	R. D
Avery John P . . .	Indianapolis . . .	N. R.	Billman, G. S. . . .	Indianapolis . . .	R. D
Bacon, Edgar H . . .	Indianapolis . . .	N. R. 10	Bistline, Arvilla M . .	Indianapolis . . .	N. R.
Bacon, Hattie C . . .	Indianapolis . . .	N. R. 10	Blue, Uriah L . . .	Indianapolis . . .	N. R. 10
Ball, Addison W . . .	Indianapolis . . .	R. D	Brown, Corydon . . .	Wannamaker . . .	R. D
Ballard, Joseph H . . .	Indianapolis . . .	R. D	Brown, Samuel . . .	Wannamaker . . .	N. R. 10
Barnes, A. L . . .	Southport . . .	R. D	Bower, J. V. . . .	Malott Park . . .	R. D
Barnes, C. A . . .	Southport . . .	R. D	Brown, Wm . . .	Clermont . . .	E. D
Barnes, Carl L . . .	Indianapolis . . .	E. D	Brown, B. A . . .	Brightwood . . .	R. D
Barnes, Dawson E . . .	Indianapolis . . .	E. D	Brown, J. R. . . .	Indianapolis . . .	R. D
Barnes, Henry F . . .	Indianapolis . . .	R. D	Browning, W. J . . .	Indianapolis . . .	R. D
Barnhill, J. F . . .	Indianapolis . . .	R. D	Browning, Chas. E . .	Indianapolis . . .	N. R.
Bates, J. M . . .	Broad Ripple . . .	R. D	Brubaker & Ayres . .	Indianapolis . . .	N. R. D

Marion County—Continued.

Names.	Postoffice.	School.	Names.	Postoffice.	School.
Brigham, Edwin B.	Indianapolis	P.-M. D	Deitch, O. S.	Indianapolis	R. D
Boynton, Chas. S.	Indianapolis	N. R.	Earp, S. E.	Indianapolis	R. D
Boyd, James T.	Indianapolis	R. D	Eastman, Joseph.	Indianapolis	R. D
Booz, J. Jordan	Indianapolis	R. D	Eastman, Thos. B.	Indianapolis	R. D
Bryson, Rachel A.	Indianapolis	P.-M. D	Edenharter, Geo. F.	Indianapolis	R. D
Bryan, T. N.	Indianapolis	R. D	Edwards, Samuel A.	Indianapolis	R. D
Bula, Rolla W.	Indianapolis	N. R. 10	Eisenbeiss, E. M.	Indianapolis	R. D
Buehler, Jacob.	Indianapolis	R. D	Eisenbeiss, Chas.	Indianapolis	R. D
Butler, Wm. F.	Indianapolis	R. D	Elbert, S. A.	Indianapolis	R. D
Butterfield, W. W.	Indianapolis	R. D	Fiskew, Howell T.	Indianapolis	R. D
Bye, Charles E.	Indianapolis	N. R.	Ewing, Calvin K.	Indianapolis	H. D
Bye, David M.	Indianapolis	N. R.	Falk, Frederick	Indianapolis	N. R.
Burckhardt, Louis	Indianapolis	R. D	Farnsworth, Theo. W.	Indianapolis	R. D
Cain, John C.	Haughville.	R. D	Ferguson, F. C.	Indianapolis	R. D
Caldwell, W. Hamp'n	Indianapolis	R. D	Ferguson, Chas. E.	Indianapolis	R. D
Campbell, Levi S.	Indianapolis	R. D	Ferree, S. L.	Indianapolis	R. D
Canfield, B. V.	Indianapolis	R. D	Field, M. H.	Indianapolis	R. D
Carson, J. H.	W. Indianapolis	R. D	Fish, J. Guard.	Indianapolis	N. R.
Carson, L. O.	Traders' Point.	R. D	Fisher, Amos W.	Indianapolis	P.-M. D
Carey, Geo. A. E.	Indianapolis	R. D	Fletcher, C. I.	Indianapolis	R. D
Carey, Elmer E.	Indianapolis	R. D	Fletcher, W. B.	Indianapolis	R. D
Carroll, Robert J.	Indianapolis	R. D	French, Benj. F.	Indianapolis	N. R.
Carter, Nathan P.	Indianapolis	R. D	French, Martha J.	Indianapolis	R. D
Carvin, James M.	Indianapolis	N. R. 10	Funk, James B.	Indianapolis	R. D
Castor, H. C.	Indianapolis	R. D	Furniss, Henry W.	Indianapolis	R. D
Casebeer, Jacob B.	Indianapolis	R. D	Furriss, Sumner A.	Indianapolis	R. D
Cline, L. C.	Indianapolis	R. D	Gabe, H. E.	Indianapolis	R. D
Chavis, Wm. M.	Indianapolis	R. D	Galloway, C. E.	Indianapolis	R. D
Chitwood, Geo. R.	Indianapolis	R. D	Garver, John G.	Indianapolis	R. D
Clark, Andrew J.	Indianapolis	N. R.	Garver, Wm. R.	Indianapolis	N. R.
Clark, Jedediah A.	Indianapolis	N. R.	Gardner, Jesse S.	Indianapolis	N. R.
Clark, William H.	Indianapolis	N. R. 10	Gaston, John M.	Indianapolis	N. R.
Clarke, Henry T.	Indianapolis	R. D	Gaylord, H. G.	Indianapolis	R. D
Clarke, Wm. B.	Indianapolis	H. D	Geis, John F.	Indianapolis	R. D
Clemmer, Ferd. O.	Indianapolis	H. D	George, —	Indianapolis	H. D
Clevenger, Wm. F.	Indianapolis	R. D	George, —	Indianapolis	H. D
Cloud, Laura J.	Indianapolis	N. R.	Gillespie, —	Glen's Valley.	R. D
Coleman, James M.	Indianapolis	R. D	Glass, Wm.	Indianapolis	R. D
Comingore, John A.	Indianapolis	R. D	Graham, Alvis B.	Indianapolis	R. D
Coble, P. A.	New Augusta	N. R.	Gray, John M.	Indianapolis	N. R.
Combs, G. W.	Indianapolis	R. D	Gray, Wm.	Indianapolis	R. D
Cook, George J.	Indianapolis	R. D	Graydon, R. G.	Southport.	R. D
Courtney, T. E.	Indianapolis	R. D	Hagg, Emil.	Indianapolis	R. D
Crist, D. O.	Indianapolis	R. D	Haggard, Ernest M.	Indianapolis	P.-M. D
Croese, S. E.	Indianapolis	R. D	Hagood, Lewis M.	Indianapolis	N. R.
Compton, Joshua A.	Indianapolis	H. D	Hall, Emmett A.	Indianapolis	R. D
Conner, Wm. H.	Indianapolis	N. R. 10	Hamer, Nathan L.	Indianapolis	P.-M. D
Cook, Matthew D.	Indianapolis	N. R. 10	Hannable, Chas. A.	Indianapolis	N. R.
Cook, Benj. J.	Indianapolis	R. D	Harold, David H.	Indianapolis	P.-M. D
Cooper, Charles A.	Indianapolis	N. R. 10	Harold, Cyrus N.	Indianapolis	P.-M. D
Cox, Ira E.	N. Indianapolis	R. D	Hart, Millard M.	Indianapolis	P.-M. D
Crons, James T.	Indianapolis	N. R.	Hasty, George	Indianapolis	P.-M. D
Cropper, Charles A.	Indianapolis	N. R.	Haynes, John R.	Indianapolis	H. D
Crow, Charles R.	Indianapolis	R. D	Haynes, W. H.	Indianapolis	R. D
Culver, Thos. M.	Indianapolis	R. D	Hays, Florence	Indianapolis	R. D
Cunningham, H. S.	Indianapolis	R. D	Hays, Franklin W.	Indianapolis	R. D
Curreyer, Wm. F.	Indianapolis	R. D	Hazleton, Fred. Q.	Indianapolis	N. R.
Curry, Thos.	Southport.	E. D	Hadley, Evn.	Indianapolis	R. D
Curtis, John E.	Indianapolis	N. R.	Harvey, J. B.	Indianapolis	R. D
Daniels, Anna E.	Indianapolis	N. R.	Heath, F. C.	Indianapolis	R. D
Darnell, Roland T.	Indianapolis	R. D	Helming, Theo. W.	Indianapolis	R. D
Daugherty, John M.	Indianapolis	R. D	Hervey, James W.	Indianapolis	R. D
Davis, Emily J.	Indianapolis	N. R.	Hervey, Edwin V.	Indianapolis	R. D
Davis, Eugene J.	Indianapolis	R. D	Hibbs, James I.	Indianapolis	R. D
Davis, Joel R.	Indianapolis	N. R.	Hicks, Joseph M.	Indianapolis	N. R. 10
Dedmon, James E.	Indianapolis	N. R.	Hobbs, Alice L.	Indianapolis	R. D
Dellett, Jacob	Indianapolis	R. D	Holden, Wm. A.	Indianapolis	N. R.
DeHass, T. W.	Indianapolis	R. D	Hollingsworth, J. S.	Indianapolis	R. D
Deitch, O. L.	Indianapolis	R. D	Holman, Chas. C.	Indianapolis	N. R.
Dearmin, J. H.	Acton.	N. R.	Holmes, James H.	Indianapolis	N. R.
Dowell, Geo. W.	Indianapolis	N. R.	Hoover, John E.	Indianapolis	R. D
Dudley, Hubert W.	Indianapolis	R. D	Hokins, Walter D.	Indianapolis	R. D
Dunlap, John M.	Indianapolis	R. D	Houser, J. A.	Indianapolis	R. D
Dunlavy, Ira E.	Indianapolis	R. D	Houser, S. K.	Indianapolis	R. D
Dunning, Milo	Indianapolis	R. D	Howard, Edward	Indianapolis	R. D
Dunning, L. H.	Indianapolis	R. D	Howard, Louis M.	Indianapolis	N. R.
Dunham, Chas. A.	Indianapolis	R. D	Howe, Wm. F.	Indianapolis	R. D
Deason, H. A.	Indianapolis	R. D	House, G. H. F.	Indianapolis	R. D
Deere, G. W.	Cumberland.	N. R.	Hodges, E. F.	Indianapolis	R. D

Marion County—Continued.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Hutchins, Frank F.	Indianapolis	R. D	Moore, Chas. E.	Indianapolis	R. N. R.
Hultsizer, ---	Clermont	R. D	Moore, Samuel H.	Indianapolis	R. D
Irick, Geo. W.	Indianapolis	E. D	Moore, Thomas	Indianapolis	N. R. 10
Jamson, Henry	Indianapolis	R. D	Morgan, Abraham	Indianapolis	N. R.
Jamson, P. H.	Indianapolis	R. D	Morgan, Wm. V.	Indianapolis	R. D
Jeffries, W. E.	Indianapolis	R. D	Morris, Minor	Indianapolis	R. D
Jennings, W. L.	Bridgeport	R. D	Morrison, Frank A.	Indianapolis	R. D
Jenkins, John R.	Indianapolis	E. D	Marrow, Jas. E.	W. Indianapolis	R. D
Jeter, Clarinda E.	Indianapolis	N. R.	Mullan, Amassa J.	Indianapolis	N. R.
Jeter, Frank	Indianapolis	E. D	Mutz, Chas. M.	Indianapolis	R. D
Johnson, Wm. H.	Brightwood	R. D	Nash, Geo. W.	Indianapolis	R. D
Johnstone, Paul A.	Indianapolis	N. R.	Neff, David	Indianapolis	N. R. 10
Jones, Homer I.	Indianapolis	R. D	Nichols, John D.	Indianapolis	R. D
Jones, Levi M.	Indianapolis	R. D	Noble, Thomas B.	Indianapolis	R. D
Jordan, John S.	Indianapolis	E. D	Oliver, John H.	Indianapolis	R. D
Jordan, Loran W.	Indianapolis	H. D	Outland, Edgar M.	Indianapolis	P.-M. D
Karlo, Geo. D.	Indianapolis	R. D	Page, Lafayette F.	Indianapolis	R. D
Karstetter, W. B.	N. Indianapolis	R. D	Pantzer, Hugo O.	Indianapolis	R. D
Kayue, Jennie A.	Indianapolis	N. R. D	Park, Hiram A. S.	Indianapolis	E. D
Kellogg, Norman P.	Indianapolis	N. R.	Parsons, John S.	Indianapolis	E. 10
Kelsey, Russell C.	Indianapolis	P.-M. D	Partlow, John W.	Indianapolis	R. D
Kendrick, Wm. H.	Indianapolis	R. D	Patterson, Amos W.	Indianapolis	R. D
Kennedy, John W.	Indianapolis	R. D	Payne, J. H.	Julietta	R. D
Kennedy, Samuel A.	Indianapolis	R. 3	Peachee, Harrison	Indianapolis	R. 10
Kenner, Chas. A.	Indianapolis	R. N. R.	Peffley, Wm. F.	Indianapolis	R. 3
Kindleberger, W. H.	Indianapolis	R. D	Pettijohn, Otto B.	Indianapolis	R. D
Kitchen, John M.	Indianapolis	R. D	Pfaff, Orange G.	Indianapolis	R. D
Klurze, W. Herman	Indianapolis	N. R.	Pink, Herman	Indianapolis	R. D
Knerr, Chas. B.	Indianapolis	R. D	Potter, Theodore	Indianapolis	R. D
Koch, Alice H.	Indianapolis	P.-M. D	Poucher, Chas. H.	Indianapolis	R. D
Kolmer, John	Indianapolis	R. D	Preston, Abraham L.	Haughville	R. D
Krug, H. Stewart	Indianapolis	R. D	Prunk, Byron F.	Indianapolis	R. D
Kimberlin, A. C.	Indianapolis	R. D	Prunk, David H.	Indianapolis	E. D
Lambert, John A.	Indianapolis	R. D	Ray, Franklin E.	Indianapolis	R. D
Lash, H. M.	Indianapolis	R. D	Ratliff, B.	West Newton	R. D
Lake, M. Elizabeth	Indianapolis	R. D	Rainey, Harvey W.	Indianapolis	N. R.
Lameroux, Scott T.	Indianapolis	N. R.	Reade, Jeremiah	Traders Pt.	N. R.
Lawhorn, Wm. M.	Indianapolis	N. R.	Reed, Wilson	Indianapolis	H. D
Lacock, Reuben T.	Indianapolis	E. D	Rees, Wm	Indianapolis	R. D
Leatherman, A. L.	Indianapolis	R. D	Reyer, Ernest C.	Indianapolis	R. D
Leathers, D. A.	Indianapolis	R. D	Ridpath, Henry W.	Indianapolis	R. D
Lewis, E. R.	Indianapolis	R. D	Ritter, Caleb L.	Indianapolis	R. D
Light, Robert C.	Broad Ripple	R. D	Robbins, Wesley	Indianapolis	E. D
Long, Robert W.	Indianapolis	R. D	Robertson, John F.	Indianapolis	R. D
Long, John B.	Indianapolis	R. D	Robinson, Joseph	Indianapolis	R. D
Lukenbill, J. C.	Indianapolis	R. D	Robinson, Robert D.	Indianapolis	R. D
Leeth, M. Cortez	Indianapolis	R. D	Roe, Nathan C.	Indianapolis	N. R.
Lewis, James C. D.	Indianapolis	R. D	Rogers, Rebecca W.	Indianapolis	R. D
Long, Henry	Indianapolis	E. D	*Rooker, J. L.	Castleton	R. D
Lockridge, John E.	Indianapolis	R. D	Rowe, Louis M.	Indianapolis	R. D
Lutz, Geo. W.	Indianapolis	R. D	Rowley, Wm	Indianapolis	H. D
McClellan, Alonzo	Haughville	N. R.	Runnels, Orange S.	Indianapolis	H. D
McConnell, Leander	Indianapolis	R. D	Runnels, Sallis	Indianapolis	H. D
McCurdy, Olive B.	Indianapolis	R. D	Rutledge, Elijah D.	Indianapolis	E. D
McCurdy, Lawson A.	Indianapolis	R. D	Ruse, A. O.	Clermont	R. D
McDonald, W. B.	New Augusta	R. D	Rutler, Jennie F.	Indianapolis	E. D
McFall, Rose C.	Indianapolis	E. D	Ryan, Wm. B.	Indianapolis	R. D
McLain, Liberty C.	Indianapolis	R. D	Schaefer, C. Richard	Indianapolis	R. D
McLeary, John D.	Indianapolis	N. R.	Scheib, John P.	Indianapolis	N. R.
McNab, Philip	Indianapolis	R. D	Scherer, Simon P.	Indianapolis	R. D
McShane, John T.	Indianapolis	R. D	Scott, John T.	Indianapolis	N. R.
Madson, Mary M.	Indianapolis	E. D	Sellers, Thos. P.	Indianapolis	R. D
Malpas, S. Herbert	Indianapolis	H. D	Selman, Andrew	Indianapolis	N. R. 10
Manchester, Jerome J.	Indianapolis	R. D	Serrin, James S.	Indianapolis	R. D
Mangum, Jennie	Indianapolis	N. R.	Servass, George L.	Indianapolis	R. D
Manker, Frank E.	Indianapolis	R. D	Seigfried, Julia	Indianapolis	R. D
Mapes, Smith H.	Indianapolis	R. D	Seilkin, Lillian K.	Indianapolis	N. R.
Marsee, Jos. W.	Indianapolis	R. D	Sluss, John W.	Indianapolis	R. D
Martin, John A.	Indianapolis	R. D	Smith, Bartley	W. Indianapolis	P.-M. D
Masters, John L.	Indianapolis	R. D	Smith, Martha J.	Indianapolis	R. D
Maxwell, Allison	Indianapolis	R. D	Smith, Mary	Indianapolis	R. D
Mendenhall, Elijah	Indianapolis	R. D	Smith, Nelson G.	Indianapolis	E. D
*Metcalf, Chas. N.	Indianapolis	R. D	Smith, Walter	W. Indianapolis	P.-M. D
Metzler, S. N.	Indianapolis	R. D	Snowden, Jesse	N. Indianapolis	R. D
Miller, Edward T.	Indianapolis	N. R. 10	Spicer, J. W.	Acton	R. D
Miller, W. H.	Indianapolis	N. R.	Spink, Mary A.	Indianapolis	R. D
Moffett, Naomi	Indianapolis	E. D	Spes, Byron	Glenns Valley	N. R.
Moffett, E. D.	Indianapolis	R. D			
Moore, Charity	Indianapolis	N. R.			

* Deceased.

Marion County—Continued.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Stackhouse, Urbine	Indianapolis	R. D	Wagner, Theo. A	Indianapolis	R. D
Stafford, Charles A.	Indianapolis	P.-M. D	Waide, Robert	Indianapolis	P.-M. D
Stanley, John M.	Indianapolis	R. D	Walker, John C.	Indianapolis	R. D
Stephenson, John C.	Indianapolis	R. D	Walker, Isaac C.	Indianapolis	R. D
Sterne, Albert E.	Indianapolis	R. D	Wall, David	Indianapolis	R. D
Stewart, Joseph O.	Indianapolis	H. D	Walsh, Edward	Indianapolis	R. D
Stewart, Lewis	Indianapolis	H. D	Wands, Wm.	Indianapolis	R. D
Stewart, Frank C.	Indianapolis	H. D	Ward, Albert O.	Indianapolis	R. D
Stillson, Joseph O.	Indianapolis	R. D	Ward, C. V.	Cumberland	N. R.
Siles, Irwin A.	Indianapolis	R. D	Watt, Wm. H.	Indianapolis	R. D
Stockton, Sarah	Indianapolis	R. D	Watters, Patrick J.	Indianapolis	R. D
Stone, John W.	Indianapolis	E. D	Webber, Charles	Indianapolis	N. R.
Stone, R. French	Indianapolis	R. D	Wehrman, Ernest	Indianapolis	H. D
Storeh, Louis A. E.	Indianapolis	R. D	White, Alvira R.	Indianapolis	R. D
Stratford, Alfred	Indianapolis	R. D	Wiles, Frank M.	Indianapolis	R. D
Stuckey, Thomas E.	Indianapolis	R. D	Williams, Wm. O.	Haughville	R. D
Sutcliffe, John A.	Indianapolis	R. D	Williamson, John W.	Indianapolis	E. D
Swaim, Hannah M.	Indianapolis	N. R.	Wilson, Amos L.	Indianapolis	R. D
Swaim, Rachel	Indianapolis	E. D	Wilson, Chas. A.	Indianapolis	R. N. R.
Talbott, John H.	Indianapolis	R. D	Wilson, Charles L.	Indianapolis	R. N. R.
Taylor, James H.	Indianapolis	R. D	Wiater, Carl G.	Indianapolis	N. R.
Taylor, Oscar L.	Indianapolis	R. D	Wishard, Wm. H.	Indianapolis	R. D
Teague, Albert E.	Indianapolis	E. D	Wishard, Wm. U.	Indianapolis	R. D
Terrell, R. J.	Irvington	R. D	Witham, S. L.	Brightwood	N. R.
Thomas, Edwin C.	Indianapolis	R. D	Witt, Lazarus	Indianapolis	R. D
Thomas, Wm. H.	Indianapolis	R. D	Walfermann, A. Gert.	Indianapolis	R. D
Thompson, D. A.	Indianapolis	R. D	Wood, Levi	Indianapolis	E. D
Thompson, J. L.	Indianapolis	R. D	Woodard, Nathan D.	Indianapolis	P.-M. D
Thompson, Thos. L.	Irvington	R. D	Woodburn, F. C.	Indianapolis	R. D
Tinsley, Frank	Indianapolis	R. D	Woodburn, James H.	Indianapolis	R. D
Todd, L. L.	Indianapolis	R. D	Woolen, Green V.	Indianapolis	R. D
Tolley, Wm. V.	Indianapolis	R. D	Wardsworth, A.	Castleton	N. R.
Tomlinson, Chas. C.	Indianapolis	R. D	Wright, Wm. M.	Indianapolis	R. D
Tomlinson, Jas. M.	Indianapolis	N. R.	Wright, George	Indianapolis	R. D
Tomlinson, Virginia	Indianapolis	R. D	Wright, Ivy E.	Indianapolis	E. D
Towles, Alfred M.	Irvington	R. D	Wright, Philander	Indianapolis	E. D
Trees, Irwin	Indianapolis	R. D	Wylie, Bruce	Indianapolis	E. D
Tucker, Geo. W.	Haughville	N. R.	Yoke, Charles	Bridgeport	R. D
Tuttle, Vine H.	Indianapolis	N. R.	Young, Michael A.	Indianapolis	R. D
Twitchell, Alice	Indianapolis	E. D	Youns, Thomas J.	Indianapolis	R. D
Van Hummell, H.	Indianapolis	R. D	Zitlaff, Charles J.	Indianapolis	R. D
Van Hummell, Q.	Indianapolis	R. D			

Regular, 283; Eclectic, 41; Homeopathic, 19; Physio-Medical, 20; not reported, 86.
Total, 449.

Marshall County.

Aspinwall, Novitas B.	Plymouth	R. D	Kizer, James H.	Inwood	R. D
Barton, T. A.	Plymouth	R. 10	Linn, Timothy T.	Bourbon	R. D
Bowen, Isaiah	Plymouth	R. 10	Loring, Samuel C.	Burr Oak	R. D
Baker, Joseph	Plymouth	E. 10	Martin, J. S.	Plymouth	H. D
Bell, John F.	Inwood	R. 10	Matchette, A. C.	Bourbon	R. D
Brooks, Jared	Plymouth	R. D	Neville, R.	Teegarden	E. 10
Brown, C. A.	Plymouth	H. D	Nusbaum, C. E.	Bremen	R. D
Cable, A. Z.	Maxinkuckee	R. D	Oyler, William A.	Argos	R. 3
Chapman, Clark	Argos	E. 10	Riches, S. R.	Donaldson	R. 10
Denniston, Jas. M.	Lapaz	R. 10	Rannels, W. S.	Argos	R. D
Dunlap, Elizabeth W.	Plymouth	H. 10	Rea, Oliver A.	Marmont	R. D
Dutt, George M.	Argos	E. D	Reynolds, G. R.	Plymouth	R. D
Eidson, J. W.	Bourbon	R. D	Roy, T. V.	Plymouth	E. D
Eley, Lorenzo D.	Ilion	R. D	Smith, J. W.	Plymouth	R. D
France, Samuel	Bourbon	R. D	Spencer, Joseph	Ilion	E. 10
Gould, S. W.	Argos	R. D	Stevens, A. E.	Maxinkuckee	R. 10
Hamilton, John J.	Lapaz	R. D	Strong, J. A.	Tyner City	R. D
Herring, N. A.	Bremen	E. D	Viets, Ella M.	Plymouth	H. 10
Holtzendorf, A. C.	Plymouth	R. D	Viets, E. W.	Plymouth	H. D
Holtzendorf, C. F.	Lapaz	R. D	Wahl, George F.	Bremen	R. D
Jackson, William	Plymouth	E. D	Wilson, Jas. H.	Plymouth	R. D
Johnson, Lu her	Bourbon	R. 10	Wiseman, B. W. S.	Marmont	R. D
Kaszer, Jacob	Plymouth	R. D	Weiser, Wm. A.	Bourbon	P.-M. D
KNOFF, DAVID C.	Plymouth	E. D	Younkman, A. B.	Bremen	R. D
Kendall, J. T.	Argos	R. D			

Regular, 35; Eclectic, 8; Homeopathic, 5; Physio-Medical, 1. Total, 49.

Martin County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Brittian, S. H. . . .	Loogootee . . .	R. D	Plummer, I. N. . . .	Shoals . . .	R. D
Courtney, Thos. . . .	Lost River . . .	R. D	Porter, A. W. . . .	Loogootee . . .	E. D
Dallens, F. C. . . .	Trinity Springs. R. 10		Robinson, G. M. . . .	Loogootee . . .	R. 10
Dooley, M. M. . . .	Loogootee . . .	R. D	SHIRLEY, H. W. . . .	Shoals . . .	R. D
Freeman, G. M. . . .	Shoals . . .	R. D	Sims, J. W. . . .	Dover Hill . . .	E. 10
Hays, T. A. . . .	Burns City . . .	R. D	Trueblood, J. C. . . .	Loogootee . . .	R. D
Malott, G. F. . . .	Trinity Springs. R. 10		Wright, B. S. . . .	Short . . .	R. D

Regular, 12; Eclectic, 2. Total, 14.

Miami County.

Alford, Henry . . .	Peru . . .	R. 10	Kalbfesh, A. H. . . .	Peru . . .	H. D
Brenton, W. H. . . .	Peru . . .	R. D	Kimball, M. C. . . .	Converse . . .	R. D
Boggs, M. M. . . .	Macy . . .	R. 10	Litzenberger, O. P. . . .	Converse . . .	R. 10
Bloomfield, E. M. . . .	Peru . . .	R. D	Linnville, David . . .	Peru . . .	R. D
Baldwin, J. A. . . .	Amboy . . .	E. 10	Longnecker, O. B. . . .	Converse . . .	R. D
Bolen, J. C. . . .	Chili . . .	E. 10	Marsh, S. S. . . .	Santa Fe . . .	R. D
Brower, J. . . .	Gilead . . .	E. D	Meek, J. A. . . .	Bunker Hill . . .	R. D
Bradley, N. . . .	Reserve . . .	P.-M. D	McDowell, H. P. . . .	Peru . . .	R. D
Bacon, D. N. . . .	Booker Hill . . .	R. D	Maughmer, G. C. . . .	Wawpecong. . . .	R. D
Dodels, A. J. . . .	Mexico . . .	R. D	Moore, J. W. . . .	Mexico . . .	P.-M. D
Davis, A. W. . . .	Miami . . .	E. D	Malsbery, L. O. . . .	Peru . . .	R. D
Eikenberry, A. A. . . .	Peru . . .	H. D	Mal-bery, J. O. . . .	Peru . . .	R. D
Fretz, J. C. . . .	Deedsville . . .	R. D	Miller, Louis A. . . .	Peru . . .	R. D
Frierwood, S. M. . . .	North Grove . . .	R. D	Newell, J. M. . . .	Denver . . .	R. D
Graham, B. R. . . .	Peru . . .	R. D	Passage, H. V. . . .	Peru . . .	R. D
Griswold, E. H. . . .	Peru . . .	R. D	Peters, R. J. D. . . .	Perrysburg . . .	R. D
Gilbert, James L. . . .	Bunker Hill . . .	R. D	Ramsey, S. G. . . .	Hoooversburgh . . .	R. D
Halfey, W. H. . . .	Amboy . . .	E. D	Ridenour, David . . .	Chili . . .	R. D
Helm, C. J. . . .	Peru . . .	R. D	Spooner, Jared . . .	Peru . . .	R. D
Hans, Homer C. . . .	Peru . . .	H. D	Swift, Edward J. . . .	Macy . . .	R. D
Ijams, T. F. . . .	North Grove . . .	R. D	WARD, J. O. . . .	Peru . . .	R. D

Regular, 32; Eclectic, 5; Homeopathic, 3; Physio-Medical, 2. Total, 42.

Monroe County.

AXTELL, A. J. . . .	Bloomington . . .	R. 10	Kennedy, L. . . .	— . . .	—
Baker, R. E. . . .	Harrodsburg . . .	R. D	Munson, G. E. . . .	Stanford . . .	R. D
Davis, O. F. . . .	Bloomington . . .	R. D	Oliphant, P. T. . . .	Buena Vista . . .	— 10
Farr, U. G. . . .	Bloomington . . .	R. 3	Potts, John T. . . .	Bloomington . . .	R. D
Galloway, U. G. . . .	Ellettsville . . .	R. D	Pressley, — . . .	Ellettsville . . .	R. D
Harris, John E. . . .	Bloomington . . .	R. D	Spencer, A. G. . . .	Bryants Creek . . .	R. D
Harris, James M. . . .	Ellettsville . . .	R. 10	Rice, N. L. . . .	Clear Creek . . .	—
Harris, W. W. . . .	Ellettsville . . .	R. D	Rogers, Jos. M. . . .	Bloomington . . .	R. D
Holland, P. C. . . .	Bloomington . . .	R. D	Rogers, Robert . . .	Ellettsville . . .	R. D
Holtzman, R. W. . . .	Stinesville . . .	R. D	Shrum, Mark . . .	Ellettsville . . .	R. D
Hon, U. H. . . .	Bloomington . . .	R. D	Tourner, J. P. . . .	Bloomington . . .	R. 3
Hon, A. W. . . .	Harrodsburg . . .	R. D	Weir, Robert M. . . .	Bloomington . . .	H. D
Lowder, L. T. . . .	Bloomington . . .	R. D	Weir, Charles . . .	Bloomington . . .	H. D
Luzadder, J. E. . . .	Smithville . . .	R. D	Whitted, W. L. . . .	Bloomington . . .	R. D
Judah, M. T. . . .	Gent . . .	R. 3			

Regular, 24; Homeopathic, 2; not reported, 3. Total 29.

Montgomery County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Bronaugh, C. T. . . .	New Ross . . .	R. D	Hamilton, A. N. . . .	Waynetown . . .	R. D
Beatty, J. L.	New Market . . .	R. D	Hyten, W. H.	Parkersburg . . .	R. 10
Barcus, Paul J. . . .	Crawfordsville . .	R. D	Irwin, Samuel G. . . .	Crawfordsville . .	R. D
Brown, L. L.	Kirkpatrick . . .	E. D	Jones, Oliver H. . . .	Crawfordsville . .	R. D
Brown, Alonzo	Alamo	R. D	Keegan, E. W.	Crawfordsville . .	R. D
Brown, Ira L.	Alamo	R. D	Kelso, Reese D. . . .	Waveland	R. D
Berry, Julian	Crawfordsville . .	R. D	King, R. F.	New Ross	R. D
Bonnell, H. M.	Waynetown . . .	R. D	Linn, Frank M.	New Richmond . .	R. D
Berryman, J. A. . . .	Darlington . . .	R. D	Leech, T. F.	Crawfordsville . .	R. D
Black, Dayton R. . . .	New Richmond . .	R. D	Layne, P. M.	Crawfordsville . .	E. 10
Borroughs, W. H. . . .	Shannondale . .	R. D	Lidikay, C. J.	Ladoga	R. D
Bowers, Homer	New Ross	R. D	Loffland, W. A. . . .	Linden	R. D
CHAMBERS, W. B. . . .	Crawfordsville . .	H. D	May, Willis L.	Crawfordsville . .	R. D
Cowan, E. H.	Crawfordsville . .	R. D	Mahoney, J. C.	Ladoga	H. D
Crafton, O. T.	Waveland	R. D	Olin, L. W.	Elmdale	R. D
Curry, John H.	Waveland	R. 10	Price, E. O.	Ladoga	R. D
Claypool, J. S.	Waynetown . . .	R. 3	Peacock, S. R.	Ladoga	R. D
Detcheon, Irwin	Crawfordsville . .	R. D	Ristine, W. H.	Crawfordsville . .	R. D
Detcheon, E.	Crawfordsville . .	R. 10	Straughan, K. K. . . .	Waveland	R. D
Dewey, Geo. S.	Crawfordsville . .	R. 3	Straughan, John W. . .	Russellville . . .	R. D
Dingman, Jas. O. . . .	Linden	R. D	Sutherland, Jas. S. . .	Ladoga	R. D
Duncan, Joseph R. . . .	Crawfordsville . .	E. D	Shotts, Henry R. . . .	Mace	R. D
Dunnington, R. C. . . .	Darlington . . .	R. D	Taylor, Jno. N.	Crawfordsville . .	H. D
Davidson, Jessie M. . .	Crawfordsville . .	R. D	Tilney, De Caux	Crawfordsville . .	E. D
Dickerson, J. W.	Wingate	R. D	Vanceleave, Chas. T. .	Wingate	E. D
Eddingfield, G. W. . . .	Mace	R. D	Washburn, D. M. . . .	New Richmond . .	R. D
Ensminger, S. L.	Crawfordsville . .	R. D	Wilson, John B.	Ladoga	R. D
Elter, Jacob R.	Crawfordsville . .	R. D	Walden, Chas. E. . . .	New Market . . .	R. 3
Gott, W. T.	Crawfordsville . .	H. D	Williams, G. T.	Browns Valley . .	R. D
Greene, H. E.	Crawfordsville . .	R. D	Ware, W. H.	Bowers	R. D
Griffith, Martha E. H. .	Crawfordsville . .	R. D	Webb, W. P.	Yountsville . . .	R. D
Griffith, Thos. J. . . .	Crawfordsville . .	R. D	Wilshir, Roland A. . .	Waveland	E. D
Henry, Abijah	Alamo	R. D	Young, Dudley M. . . .	Lapland	R. 3
Huchings, B. F.	Crawfordsville . .	R. D	Uit, R. J. R.	Crawfordsville . .	H. D
Hurt, W. J.	Waynetown . . .	R. D			

Regular, 57; Homeopathic, 5; Eclectic, 6. Total, 63.

Morgan County.

Blackstone, B. D. . . .	Martinsville . . .	R. D	Murphy, W. H.	Morgantown . . .	R. D
Bridge, A. P. W.	Alaska	R. D	Monical, Grant	Martinsville . . .	R. D
Banta, W. C.	Martinsville . . .	R. 10	Miller, G. W.	Martinsville . . .	R. 10
Brackney, —	Mooreville . . .	R. D	Mc Cormick, —	Eminence	R. D
Brannan, —	Paragon	R. D	McElwee, Harry	Martinsville . . .	R. D
Cure, H. W.	Martinsville . . .	R. 10	McKenzie, Donald . . .	Brooklyn	R. D
Divon, —	Wilbur	N. R. —	Obrion, —	Hall	R. D
Farr, U. H.	Martinsville . . .	R. D	Paxton, James	Paragon	R. D
Griffith, R. C.	Morgantown . . .	R. D	Prather, W. E.	Mahalasville . .	R. 10
Grim, J. G.	Waverly	R. D	Robinson, H. C.	Martinsville . . .	R. D
Harvey, D. B.	Monrovia	R. D	Reagan, A. W.	Mooreville . . .	R. D
Hendricks, W. C. . . .	Martinsville . . .	R. D	Robbins, Clark	Mooreville . . .	— 10
HENSON, THEO.	Martinsville . . .	R. D	Seaton, Chas	Martinsville . . .	R. D
Holiday, T. F.	Monrovia	R. D	Sweet, E. M.	Martinsville . . .	R. D
Horton, Ellis	Monrovia	R. D	Scotfield, —	Martinsville . . .	—
Horton, Frank	Monrovia	R. D	Tilford, A. S.	Martinsville . . .	R. D
Johnson, J. J.	Martinsville . . .	R. D	Tarlton, R. H.	Martinsville . . .	R. D
Jones, H. C.	Hall	R. D	Thompson, —	Mooreville . . .	R. D
Kennedy, D. P.	Martinsville . . .	E. D	Vanzant, W. B.	Brooklyn	R. D
Kennedy, John	Paragon	E. 10	Warton, J. O.	Waverly	R. D
Knight, J. H.	Morgantown . . .	R. D	Williamson, R. B. . . .	Paragon	R. D
Kessinger, C. A.	Martinsville . . .	R. D	Williams, K. H.	Cope	R. D
Kelso, —	Eminence	R. D			

Regular, 41; Eclectic, 2; not reported, 2. Total, 45.

Newton County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Pos'office</i>	<i>School.</i>
Boice, B. R.	Kentland.	R. D	Merry, J. W.	Mt. Ayr.	R. D
Caldwell, Samuel L.	Pilot Grove.	H. 10	Prat, B. N.	Goodland.	R. D
Chaffee, J. C. M.	Kentland.	H. 10	Recher, L. N.	Morocco	R. D
Crissler, J. B.	Brook.	E. 10	Recher, Laura	Morocco	R. D
Cronk, Fremont	Goodland.	R. D	Smith, J. B.	Brook.	R. D
Collier, Theo. E.	Brook.	R. D	Tripplett, Chas. E.	Morocco	R. D
Godfrey, L. M.	Kentland.	H. 10	Wescott, Jas. B.	Goodland.	H. 10
Humstone, M. N.	Goodland.	R. D	Robbins, I. B.	Rose Lawn	R. D
Hatch, J. A.	Kentland.	R. D	Robison, —	Brook.	—
Lovett, J. A.	Goodland.	R. D	Ibach, P. G.	Rose Lawn	R. D
McCAIN, R. C.	Kentland.	R. D	Detrich, Geo.	Kentland.	H. 10

Regular, 15; Eclectic, 1; Homeopathic, 5; not reported, 1. Total, 22.

Noble County.

Carver, W. F.	La Otto	R. D	Moore, N. B.	Merriam	R. 10
Cayner, A. G.	Kendallville	R. D	Morr, J. W.	Albion	R. D
Cowls, —	Ligonier	H. D	Maloney, F. C.	Avilla	R. D
Depew, E. W.	Wolf Lake	R. 10	Nifer, F. J.	Brimfield	E. D
Duclap, Robert	Kendallville	E. 10	Reiff, N. G.	Albion	E. D
Franks, W. H.	Ligonier	R. D	Reynolds, F. C.	Kendallville	R. D
Gants, John	Cromwell	E. D	Schlotterback, E. L.	Ligonier	R. 10
Gilbert, J. L.	Kendallville	R. D	Shobe, W. A.	Ligonier	R. D
Green, T. C.	Albion	R. D	Snapp, J. A.	Ligonier	R. D
Green, W. T.	Albion	R. D	Stoupp, G. A.	Rome City	R. 10
Goodwin, C. B.	Rome City	R. D	Seymour, C. A.	Wawaka	R. D
Hardy, F. C.	Kendallville	H. 10	Teal, Norman	Kendallville	R. D
Hays, J. W.	Albion	R. D	Teal, G. A.	Kendallville	R. D
Johnson, W. A.	Wawaka	R. D	Tucker, H. G.	Cromwell.	R. 10
Knepper, E. W.	Ligonier	R. D	Veasey. —	Avilla	R. D
Kester, R. S.	Kendallville	H. D	Woodruff, G. S.	Ligonier	E. 10
Lemmon, S. W.	Albion	R. D	Whippy, W. W.	Ligonier	H. D
Luckey, J. E.	Wolf Lake	R. D	Williams, W. S.	Kendallville	R. D
MILLER, B. E.	Albion	R. D	Wilson, D. C.	Kendallville	E. D
Mitchell, Wm. L.	Ligonier	R. D			

Regular, 29; Eclectic, 6; Homeopathic, 4. Total, 39.

Ohio County.

Gillespie, William	Rising Sun	R. D	Smith, B. R.	Laughery.	R. D
Miller, J. B.	Laughery.	R. 10	Sullivan, W. H.	Rising Sun	R. D
Rockafellow, W. A.	Laughery.	R. 3	STEVENSON, G. A.	Rising Sun	R. D
Simpson, R. G.	Rising Sun	R. D	Wilson, N. A.	Guionsville.	R. D

Regular, 5.

Owen County.

Coble, Jacob	Spencer.	R. D	McKelvey, S. R.	Spencer.	R. D
COX, NATH'NIEL D.	Spencer.	R. D	Maddox, W. B. S.	Vandalia.	R. 10
Fisher, B. L.	Quincy	R. D	Osgood, H. G.	Gosport.	R. D
Fox, Henry A.	Gosport.	R. D	Pierson, Allen	Spencer.	R. D
Figg, J. S.	Spencer.	R. 10	Pritchard, C. A.	Gosport.	R. D
Gantz, Thomas.	Freedom	R. 10	Plew, J. H.	Freedom	R. 10
Gray, O. F.	Spencer.	R. D	Richards, S. D.	Patrickburgh	R. D
Greene, E. V.	Spencer.	R. D	Rice, W. H.	Cuba	R. D
Hickam, Wilford.	Spencer.	R. D	Schell, F. A.	Spencer.	E. D
Hixon, W. H.	Farmers	E. 10	Stucky, J. M.	Gosport.	R. D
Hinkle, J. S.	Coal City	R. D	Stucky, F. V.	Gosport.	R. D
Jones, J. M.	Catact	R. 10	Sloan, J. N.	Patrickburgh	R. D
Livingston, J. J.	Freeman	E. D	Smith, J. W.	Gosport.	R. D
McDonald, D. H.	Quincy	R. D	Williams, J. A.	Patrickburgh	R. D
Minick, A. J.	Freedom	R. 10	Wooden, J.	Gosport.	R. 10
Mullinix, E. N.	Spencer.	E. 10	Yocum, Boaz	Arney.	R. D

Regular, 28; Eclectic, 3. Total, 31.

Orange County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Boyd, Chas. L	Paoli	R. D	LINGLE, S. L	Paoli	R. D
Brady, J. A.	Orleans	R. D	Luckett, E. R	French Lick	R. D
Carter, I. P.	Orangeville	R. D	Montgomery, J. W	Paoli	R. D
Gilliatt, Wm. B	Young's Creek	R. D	McDonald, St. John	Valeene	R. D
Hazlewood, Greene	Chambersburg	R. D	Patton, Chas	Orleans	R. D
Hunt, F. P	Leipsic	R. D	Pennington, Wm. D	French Lick	R. D
Holaday, B. M	Livonia	R. D	Ritter, J. A., Jr	West Baden	R. D
Hoaday, R. L	Helix	R. D	Ryan, Wm. E	French Lick	R. D
Kochenour, W. P	Rego	R. D	Ritter, Thos. B	Orangeville	R. D
Laughlin, E. D	Orleans	R. D	Ritter, H. O	Orangeville	R. 3
Lindley, Laban	Paoli	R. D	Smith, E. A	Newton Stew't	R. 3
Lingle, R. W	Orleans	R. D	Stewart, O. H	Syria	R. D
Luckett, L. P	French Lick	R. D	Tolliver, J. A	Abydel	R. D

Regular, 26. Total, 26.

Parke County.

Benell, Chas	Caseyville	N. R	McKey, R. H. W	Russell's Mills	R. 10
Baldrige, E. R.	Coxville	E. D	Morris, A. W	Rockville	R. D
Baldrige, D. E.	Coxville	E. D	Morris, C. C.	Rockville	R. D
Boyd, James M.	Annapolis	R. D	Myers, J. G. L.	Bloomingtondale	R. D
Caplinger, C. A.	Marshall	R. 3	Norman, James I.	Parkville	R. D
Crooks, James	Bridgeton	E. D	Odell, J. L.	Catlin	E. N. R
Demeter, Geo. T	Waterman	R. D	Pearce, R. C.	Bellmore	R. D
Dooley, R. T.	Bloomingtondale	R. 3	Powell, B. E.	Marshall	E. D
Evans, Everett M.	Mecca	E. D	Price, Wm. S	Tangier	R. 10
Garrigus, J. J.	Tangier	R. 3	Purcell, Walter M	Rockville	R. D
Gillum, Wm. H.	Rockville	R. D	Reeder, J. C.	Montezuma	E. D
Goldsberry, John A.	Bloomingtondale	R. D	Rodgers, H. C.	Rockville	R. D
GOSs, MARION	Rockville	R. D	Steele, W. W	Judson	R. D
Hudson, B. F.	Montezuma	R. D	Stewart, H. W	Rosedale	R. D
Lynch, J. Y.	Rosedale	R. D	Vancelev, E. L	Rockville	R. D
Malloy, H. F	Bridgeton	R. D	Welch, John A	Lena	R. D
Martin, Alonzo	Bellmore	R. D	Williamson, Wm. N.	Tangier	R. D
Mater, Jacob D.	Bridgeton	R. D	White, S. S.	Judson	R. D

Regular, 28; Eclectic, 7; not reported, 1. Total, 36.

Perry County.

Bacon, J. D.	Troy	R. 10	Butehason, W. R.	Cannelton	R. D
Bennett, J. B.	Derby	R. 3	Ladd, C. W	Cannelton	R. D
BUCKER, C. M	Tell City	E. D	Lee, J. H	Rome	E. D
Carnavan, J. W.	St. Croix	R. 3	Lomax, Wm	Preston	R. D
Cluthe, Wm.	Tell City	R. D	Mason, C	Tell City	R. D
Cox, C. E	Cannelton	R. 3	Repperdam, J. H.	Rome	R. D
Dorne, D. C.	Troy	R. 10	Speede, —	Branchville	R. D
Evans, F. A.	Tell City	E. 10	Spedell, F. W.	Leopold	R. D
Eads, L. T.	Cannelton	N. R. 3	Vanwinkle, —	German Ridge	R. 10
Foster, J. C.	Uniontown	E. 10	Venneman, R. T	Cannelton	R. D
Henderson, A. M. D	Rome	R. D	Webb, J. R	Troy	E. 3
Howard, W. R	Don Juan	R. 10	Wedding, F. M.	Rome	R. D

Regular, 19; Eclectic, 4; not reported, 1. Total, 24.

Pike County.

Adams, J. R	Petersburg	R. D	Howe, Hardin	Ivy	R. D
Burger, F. J.	Petersburg	R. D	Hatfield, B. F.	Union	R. D
Basinger, T. W	Petersburg	R. D	Hamilton, J. S	Arthur	E. D
Byers, A. R	Petersburg	R. D	Hunter, W. M	Petersburg	R. D
Beardsley, J. M.	Winslow	R. D	Imel, E. S	Algiers	R. D
Basinger, J. H	Oatsville	R. D	Ireland, G. L.	Winslow	R. D
Bethel, W. J.	Winslow	R. 10	Kimes, J. L.	Petersburg	R. D
Blythe, W. T	Glezen	R. 3	Lamar, S. H	Petersburg	E. D
Bergen, J. W	Petersburg	R. D	Link, W. H.	Petersburg	R. D
Coleman, J. W	Union	R. D	Lance, J. T.	Spurgeon	R. 3
CLARK, S. R	Ottwell	R. D	Osborn, W. R.	Spurgeon	R. D
Corn, Nathaniel	Augusta	R. D	Pazin, Henry	Velpen	E. D
DeTar, David	Winslow	R. 3	Rhodes, A. J.	Pikeville	R. 10
DeMotte, W. M.	Ottwell	R. D	Rice, T. R.	Petersburg	H. D
Godwin, J. W.	Ottwell	H. 10	Smith, J. T.	Glezen	R. 10
Grim, G. F	Augusta	R. D	Smith, W. H	Glezen	R. D
Harrington, A. J.	Velpen	R. 10	Stook, John H	Stendal	R. D
Harris, R. W	Algiers	R. D	Thomas, M. C	Petersburg	E. 10
Hillmeyer, L. H.	Stendal	R. D	Woodward, L. E	Winslow	R. D
Hillmeyer, F. E.	Velpen	R. D			

Regular, 33; Eclectic, 4; Homeopathic, 2. Total, 39.

Porter County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Beer, H. M.	Valparaiso	R. D	Ketchum, F. G. . . .	Valparaiso	H. D
Blount, Robley D . .	Wheeler	R. D	Miller, K. E.	Chesterton	R. D
CARSON, J. C. . . .	Valparaiso	R. D	McCarthy, John . . .	Valparaiso	R. D
Callahan, —	Chesterton	R. D	Ryan, John A.	Valparaiso	R. D
Detherman, A. A. . .	Valparaiso	R. D	Ruben, B.	Chesterton	N. R. D
Doring, D. J.	Valparaiso	R. D	Sayles, M. T.	Valparaiso	H. D
Elliot, L. W.	Valparaiso	H. D	Wood, O. S.	Valparaiso	E. D
Hubberd, R. B. . . .	Hebron	R. D	Wilson, J. R.	Hebron	R. D
Johnston, C. H. . . .	Chesterton	R. D	Yohn, Edwin T. . . .	Hebron	R. D

Regular, 13; Homeopathic, 3; Eclectic, 1; not reported, 1. Total, 18.

Posey County.

Bell, A. W.	West Franklin . R. D	Murphy, Edward . . .	New Harmony . R. D
Brydon, John F. . . .	Griffin	Murphy, C. F.	Griffin
Cremens, W. C. . . .	Buffkin	Neal, Daniel	New Harmony . R. 10
Cosby, L. B.	Cynthiana	Neal, Ben E.	New Harmony . R. D
Deutsdorf, H. B. . . .	Parker Settlement . R. 10	PEARSE, S. H.	Mt. Vernon . R. D
Dixon, K. S.	Mt. Vernon . H. 10	Peckinpaugh, G. R. .	Mt. Vernon . R. D
Elliott, Cyreneus, Jr.	Blairsville . R. 3	Powell, J. W.	Mt. Vernon . R. 3
Fullenwider, C. H. . .	Mt. Vernon . R. D	Preston, C. M.	Mt. Vernon . E. D
Gudgel, Jas. E. . . .	Cynthiana . R. D	Ramsey, D. C.	Mt. Vernon . R. D
Gamman, D. A. . . .	New Harmony . R. D	Rawlings, S. O. . . .	Hew Harmony . R. D
Glaze, L. M.	New Harmony . R. D	Runcie, G. U.	Poseyville . R. D
Getting, C. C.	Mt. Vernon . R. 10	Rutter, John	Cynthiana . E. 3
Goodwin, E. J.	Solitude . R. D	Spencer, E. V.	Mt. Vernon . R. D
Grim, Simon	St. Phillips . R. D	Smyth, Richard	Mt. Vernon . R. D
Hall, T. J.	Solitude . R. D	Smith, Geo. C.	Poseyville . R. D
Holton, Wm. M. . . .	New Harmony . R. D	Sugg, H. H.	Mt. Vernon . E. D
Hicks, C.	Caborns . R. D	Turman, Ira L.	Cynthiana . R. D
Huston, J. C.	Mt. Vernon . R. D	Williams, J. B.	Grafton . R. 10
Harper, John	Mt. Vernon . R. D	Welborn, Geo W. . . .	Stewartsville . R. D
Hensler, Ernst	Hensler P. O. . R. 3	Wilson, John B.	Stewartsville . R. D
Henderson, S. C. . . .	St. Phillips . R. D	Wils. n. Thomas W. .	New Harmony . R. D
Krausgrill, David . . .	Wadesville . R. D	Welch, D. W.	Mt. Vernon . R. D

Regular, 39; Eclectic, 4; Homeopathic, 1. Total 44

Pulaski County.

Buck, F. G.	Star City	R. D	Mass, D. F.	Winamac.	R. D
Buck, G. W.	Star City	R. D	Sharrer, J. C.	Francisville	R. D
Brown, S.	Francisville	R. D	Stevens, C.	Star City	P.-M. D
Hovians, R. D	Pulaski.	R. D	THOMAS, J. J.	Winamac.	R. 10
Hall, S. J.	Ora	P.-M. D	Thomas, A. M.	Winamac.	R. D
Hoab, P. L.	Monterey.	R. D	Thompson, G. W.	Winamac.	R. D
Jones, H. G.	Medaryville	R. D	Thompson, W. H.	Winamac.	R. D
Jones, E. V.	Medaryville	R. D	Smith, L.	Winamac.	H. 10
Kittinger, H.	Winamac.	R. D	Vaughn, M.	Winamac.	R. 3
Kelsey, Wm.	Monterey.	R. D	Washburn, G. W.	Pulaski.	E. D
Kelsey, Wm., Jr.	Monterey.	R. 3			

Regular, 17; Eclectic, 1; Homeopathic, 1; Physio-Medical, 2. Total, 21.

Putnam County.

Allen, Charles A. . . .	New Maysville . R. D	Mitchell, R. S.	Morton	R. D
BENCE, G. W.	Greencastle . R. D	Mullinix, P.	Cloverdale . R. 3	
Bastin, J. V.	Belle Union . R. D	Moore, A. H.	Clinton Falls . R. D	
Brasier, T. T.	Greencastle . R. 3	McCandless, A. S. . .	Roachdale . R. D	
Cully, J. F.	Bainbridge . R. D	McClure, S. W.	Cloverdale . R. D	
Colliver, R. T.	Roachdale . E. D	New, Y. N.	Barnard . R. D	
Collins, C. C.	Roachdale . R. D	Nugent, R. P.	Clinton Falls . R. 10	
Denny, Wm. M.	Greencastle . R. 10	Prichard, W. K. . . .	Cloverdale . R. D	
Evans, E. B.	Greencastle . R. D	Preston, J. L.	Cloverdale . R. D	
Farver, G. W.	Bainbridge . R. D	Poole, George W. . . .	Greencastle . R. D	
Gillespie, J. F.	Keelsville . R. D	Robinson, Josiah . . .	Coatsville . R. D	
Grimes, J. B.	Barnard . R. D	Slavens, John	Brick Chapel . R. D	
Hanna, L. M.	Greencastle . R. D	Smythe, G. C.	Greencastle . R. D	
Harris, W. C.	Roachdale . R. D	Stanley, L.	Fincastle . R. D	
Harvey, J. W.	Russelville . R. D	Spurgeon, B. F.	Mt. Meridian . R. D	
Hill, W. D.	Greencastle . H. 10	Summers, W. F.	Raccoon . R. D	
Hawkins, E.	Greencastle . R. D	Taylor, Mary J.	Greencastle . H. D	
Horn, A. H.	Putnamville . R. D	Taylor, George W. . . .	Greencastle . H. 10	
Horn, C. S.	Barnard . P.-M. D	Throop, George A. . . .	Greencastle . R. D	
Knight, J. M.	Greencastle . E. D	Terrell, W. H.	Fillmore . R. 10	
Lammers, F. M. . . .	Greencastle . R. D	Tucker, W. W.	Greencastle . R. D	

Regular, 36; Homeopathic, 3; Eclectic, 2; Physio-Medical, 1. Total, 42.

Randolph County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Abel, Oscar E. . . .	Trenton. . .	R. D	Harrison, Harlan. . .	Union City . .	E. D
Alexander, Mrs. P. . .	Winchester. P.-M.	10	Hiatt, John A. . . .	Ridgeville . .	E. D
Addington, I. H. . .	Farmland . .	R. D	Hiatt, Christopher C. .	Ridgeville . .	E. D
Adams, J. F.	Clark	P.-M. D	Hunt, Bader S. . . .	Winchester. . .	R. D
Berry, John S. . . .	Spartanburg. .	R. D	Johnson, Ed. W. . . .	Union City . .	R. D
Blair, James S. . . .	Lynn	R. D	Kelley, Clifton M. . .	Winchester. . .	R. D
Burkett, Charles T. .	Clark	E. D	Markle, John E. . . .	Winchester. . .	R. D
Bruce, George W. . .	Winchester. . .	R. 10	Markle, Grant C. . . .	Winchester. . .	R. D
Bosworth, Richard . .	Winchester. . .	R. D	Milligan, Charles E. .	Winchester. P.-M.	D
Botkin, John W. . . .	Winchester. . .	E. 10	Morgan, Thomas W. . .	Spartanburg. .	R. D
Botkin, Thomas W. . .	Farmland . .	E. 3	Mason, S.	Arba	R. D
Beauchamp, Henry W. .	Randolph. . .	P.-M. D	McFarland, Norman . .	New Pittsburg .	E. 10
Carver, James M. . .	Winchester. . .	R. 10	McNaul, Charles. . . .	Winchester. . .	R. D
Chenoweth, John T. . .	Winchester. . .	R. D	Nixon, John	Farmland. . .	R. D
CHENOWETH, F. A. . .	Winchester. . .	R. D	Noffsinger, Henry . . .	Union City . .	E. D
Chenoweth, Nelson T. .	Windsor . . .	R. D	Owens, John K. . . .	Harrisville . .	R. 3
Commons, William. . .	Union City . .	R. D	Proctor, Jeremiah A. .	Union City. . P.-M.	10
Cox, Cyrus	Lynn	R. D	Purcell, Mrs. Sarah. . .	Randolph . . .	R. 10
Coffin, Alonzo W. . .	Carlos City . .	E. D	Reynard, Granville. . .	Union City . .	R. D
Clapper, David	Farmland . .	H. D	Reynard, Edward G. . .	Union City . .	R. D
Chapman, Silas	Ridgeville . .	E. D	Ruby, Samuel B. . . .	Union City . .	R. 3
Clark, John M.	Modoc	R. 10	Reeves, John L. . . .	Union City . .	E. D
Cromer, L. G.	Union City . .	R. D	Rogers, A. G. . . .	Parker	R. D
Davis, Lewis N. . . .	Farmland . .	R. D	Rommel, Mrs. Sylv. . .	Winchester. P.-M.	10
Evans, Caleb S. . . .	Union City . .	R. D	Ross, N. B.	Modoc	E. D
Evans, Joseph J. . . .	Winchester. . .	R. 10	Smith, Calvin	Farmland . .	E. D
Frederick, George W. .	Ridgeville . .	R. D	Spitler, Charles E. . .	Saratoga . . .	R. D
Frederick, John	Ridgeville . .	R. D	Snodgrass, B. K. . . .	Union City. P.-M.	D
Farquhar, Allan H. . .	Ridgeville . .	R. D	Thompson, George W. .	Union City. . .	E. D
Franks, Hamilton P. .	Losantville . .	R. D	Tisor, William R. . . .	Rural.	R. 10
Fisher, Martin L. . . .	Winchester. P.-M.	D	Welbourne, Ed. L. . . .	Union City . .	E. D
Gustin, Francis M. . .	Union City . .	H. D	Yergin, Henry H. . . .	Union City . .	R. D
Huddleston, Albert F. .	Winchester. . .	H. D			

Regular, 39; Eclectic, 15; Physio-Medical, 8; Homeopathic, 3. Total, 65.

Ripley County.

Abbott, Mano	Milan. . . .	E. D	Miller, A. G.	Elrod.	E. D
Anderson, James. . .	Versailles . .	R. D	Newforth, C.	Sunman	R. D
Brown, C. M.	New Marion . .	R. D	Parsons, Geo. E. . . .	Milan.	E. D
Cox, L. T.	Napoleon . . .	R. D	OLMSTED, R. T. . . .	Versailles. . .	R. D
Cox, Jacob	Holton	R. D	Robinson, J. M. . . .	Versailles. . .	R. D
Cass, C. H.	Holton	R. D	Roberts, Jerry	Holton	R. 3
Combs, M. Joseph . .	Rexville . . .	R. D	Redlow, D. M.	Pierceville . .	R. D
Davis, J. R.	Batesville . .	R. D	Ratcliff, J. T.	Morris	R. D
Freeman, E. D. . . .	Osgood	R. D	Sweezy, J. M.	Cross Plains . .	E. 10
Freeland, J. P. . . .	Sunman	R. D	Schlosser, Geo. F. . .	Batesville . .	R. 10
Hicks, J. C.	Napoleon. . P.-M.	D	Townsend, S. B. . . .	Delaware. . .	R. D
Hess, John N.	New Marion . .	R. D	Townsend, R. C. . . .	Osgood	R. D
Holbert, W. M. . . .	Elrod.	R. D	Vincent, E. B.	Sunman	R. D
Jones, J. G.	Versailles . .	R. D	Waterberry, J. E. . . .	Holton	R. D
Joseph, A.	Osgood	R. D	Fuller, William	Cross Plains . .	R. D
Joseph, Peter. . . .	Osgood	R. D	Bradley, J. T.	Cross Plains . .	R. D
Lamb, J. F.	Delaware. . .	E. D	Ziteke, Joseph	Batesville . .	R. D
Miller, R. H.	Cross Plains . .	R. D	Lord, T. J.	Milan.	E. D

Regular, 29; Eclectic, 6; Physio-Medical, 1. Total, 36.

Rush County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Arnold, John	Rushville	R. D	Megee, Omer	Rushville	R. D
Beher, E. H.	Rushville	E. D	Mitchell, R. R. . . .	New Salem	R. D
Barnum, W. E. . . .	Manilla	R. D	Linn, H. G.	Rushville	H. D
Crippen, E. H. . . .	Milroy	R. 3	Lowden, L. A. . . .	Manilla	R. D
Coffin, O. S.	Carthage	E. D	McGaughy, J. E. . .	Arlington	R. D
Dillion, J. C.	Rushville	R. D	Parson, C. H. . . .	Rushville	R. D
Dillion, O. P.	Rushville	R. D	Porter, W. J. . . .	Carthage	R. D
Dean, D. H.	Rushville	H. D	Paxton, E. J. T. . .	Glenwood	R. D
Elliott, H. H. . . .	Glenwood	E. 3	Rea, Chas.	Falmouth	R. D
Gilbert, Chas. H. . .	Rushville	H. D	Rucker, T. H. . . .	Arlington	E. 10
GREEN, LOT	Rushville	R. D	Sexton, J. C. . . .	Rushville	R. D
Gordon, W. S. . . .	Raleigh	P.-M. D	Smith, W. H. . . .	Rushville	R. D
Hackleman, F. G. . .	Rushville	R. D	Smith, W. C. . . .	Rushville	R. D
Hall, A. S.	Arlington	R. D	Spurrier, J. H. . . .	Rushville	R. D
Inlow, J. J.	Manilla	R. 10	Sipe, John A. . . .	Carthage	R. D
Jones, Geo. B. . . .	Rushville	R. D	Smith, I. F.	Arlington	R. D
Kennedy, Donald . . .	Homer	R. D	Tevis, Jas. L. . . .	Moscow	R. 10
Louis, J. G.	Rushville	H. D	Thomas, S. C. . . .	Milroy	R. D
Moffett, John	Rushville	R. D	Wooten, E. I. . . .	Rushville	R. D
Megee, W. N.	Rushville	R. D			

Regular, 30; Homeopathic, 4; Eclectic, 4; Physio-Medical, 1. Total, 39.

Scott County.

Biery, T.	Scottsburg	R. D	McClain, Levi	Scottsburg	R. D
Blocher, J. B. . . .	Blocher	R. D	ROGERS, S. M. . . .	Scottsburg	E. 10
Casey, H. R.	Austin	R. D	Sarver, J. A.	New Frankfort. . .	R. D
Greene, E. W. . . .	Lexington	E. D	Tammady, H.	Austin	R. D
Hougland, M. E. . .	Vienna	E. 10	Tichnor, J. B. . . .	Austin	R. D
Kendall, P. A. . . .	Austin	R. D	Warmouth, G. M. . .	Scottsburg	R. D

Regular, 9; Eclectic, 3. Total, 12.

Shelby County.

Abernethy, A. A. . .	Morristown. . . .	H. D	Louden, J.	Carrollton	E. D
Adams, Ovid	Shelbyville. . . .	R. D	Lucas, J. N.	Shelbyville. . . .	H. D
Baylor, W. R. . . .	Waldron	E. 10	Leech, E. W.	Shelbyville . . .	E. N. R
Black, T. B.	Bengal	E. D	Maze, Thomas B. . .	Fairland	N. R. 10
Bowbly, Joseph. . .	Shelbyville. . . .	R. D	McCrea, R. S. . . .	Morristown	N. R. 10
Bently, W. R. . . .	Morristown. . . .	H. D	McFadden, W. G. . .	Shelbyville . . .	N. R. 10
Borher, Daniel . . .	Noah	R. D	McCain, J. T. . . .	Waldron	N. R. 10
Boon, —	Bogstown	R. D	Norton, W. J. . . .	Flat Rock	N. R. 10
Connely, H. M. . . .	Flat Rock	R. D	Norton, —	Smithland	N. R. 10
Clubs, J. W.	Fairland	R. D	Pearson, W. M. . . .	Fountain't'n. . . .	N. R. 10
Carney, J. W. . . .	Shelbyville. . . .	E. 10	Pettigrew, D. A. . .	Flat Rock	N. R. 10
Cook, —	Gwynneville . . .	R. D	Plake, —	Flat Rock	N. R. 10
Cambel, —	Shelbyville. . . .	R. D	Parrish, J. W. . . .	Shelbyville. . . .	E. 10
Drake, Morris	Shelbyville. . . .	R. D	Rucker, J. W. . . .	Shelbyville. . . .	R. 10
Ford, W. M.	Mt. Auburn	R. D	Robins, J. P. . . .	Shelbyville. . . .	R. 10
Fleming, G. W. . . .	Shelbyville. . . .	R. D	Rubush, T. R. . . .	London	R. 10
Furney, W. C. . . .	Morristown. . . .	R. D	Randolph, D. F. . .	Waldron	R. 10
Green, J. W.	Shelbyville. . . .	R. D	Sanford, J. H. . . .	Shelbyville. . . .	R. 3
Green, W. F.	Shelbyville. . . .	R. D	Shrout, W. T. . . .	Cynthiana	E. D
Hess, M. M.	Morristown. . . .	R. D	Strickler, S. L. . . .	Bogstown	R. D
Inlow, Isaac N. . . .	Cynthiana	R. 10	Stewart, J. B. . . .	Marietta	R. D
JONES, T. S.	Shelbyville. . . .	R. D	Stewart, J. K. . . .	Fairland	R. D
Knapp, W. T.	Shelbyville. . . .	H. D	Snyder, —	Fairland	R. D
Keeling, J. E. . . .	Sulphur Hill . . .	R. D	Smith, H. M.	Fenns.	R. 10
Kennedy, S. A. . . .	Shelbyville. . . .	R. D	Tindall, C. A. . . .	Shelbyville. . . .	E. D
Kennedy, T. C. . . .	Shelbyville. . . .	R. D	Taylor, John	Sulphur Hill . . .	R. D
Kennedy, S.	Shelbyville. . . .	R. D			

Regular, 32; Eclectic, 7; Homeopathic, 4; not reported, 10. Total, 53.

Spencer County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names</i>	<i>Postoffice.</i>	<i>School.</i>
Adye, G. F.	Newtonville	R. D	Jolly, J. C.	Lake	R. D
Adye, C. H.	Patronville	R. D	James, J. B.	Buffaloville	R. 10
Allenbaugh, E. E. . .	Huff	R. D	John, B. B.	Gentryville	E. 10
Anderson, E. M. . . .	Fulda	R. D	Killian, J. L.	Rockport	R. 10
Beeler, W. R.	Rockport	R. D	Knox, J. W.	Rockport	R. D
Bryant, W. S.	Dale	R. D	Lucas, L. B.	Buffaloville	E. D
Bryant, J. H.	Gentryville	R. 10	Lang, Jacob	Rockport	H. D
Billant, F. W.	Chrisney	R. 10	Lamar, H. L.	Eureka	R. D
Butler, J. M.	Troy	E. D	Logsdon, W. T. . . .	Eureka	R. D
Buxton, J. L.	Rockport	E. D	Maslowsky, Felix . .	Mariah Hill	R. D
Cato, J. B.	Chrisney	R. D	McCoy, L. H.	Lake	E. D
Curry, H. M.	Grandview	R. D	McKasson, J. W. . .	Gentryville	R. 10
Critchfield, J. S. . .	Lamar	E. D	Schweizer, J. J. . . .	Santa Claus	R. 3
Daily, J. M.	Rockport	R. D	Stuteville, S. W. . .	Grandview	R. D
Dyer, A. S.	Huffman	R. 3	Turpin, James	Newtonville	E. D
Ehrman, E. D.	Rockport	H. 3	White, Arthur	Rockport	R. D
Goble, D. S.	Chrisney	R. D	White, H. Q.	Grandview	R. D
Gatewood, T. H. . . .	Midway	R. D	White, J. T.	Grandview	R. 3
Gwaltney, S. P. . . .	Midway	E. D	WHEELER, J. T. . . .	Rockport	E. D
Hackleman, F. M. . .	Rockport	E. D	Williams, W. H. . . .	Dale	E. D
Harrison, E. P.	Rockport	R. 10	Wash. Geo. A.	St. Meinrad	R. D
Harrom, G. W.	Hatfield	R. D	Youngblood, E. L. . .	Lake	H. D
Hunter, S. W.	Chrisney	R. 3			

Regular, 30; Homeopathic, 4; Eclectic, 11. Total, 45.

Starke County.

Abner, J. R.	Grovestown . P.-M.	D	KELLEY, W. M. . . .	Knox	R. D
Agnew, L. J.	San Pierre	R. D	Keller, ———	Ora	P.-M. D
Boner, S. S.	Hamlet	R. 10	Noland, J. F.	North Judson . . .	R. D
Boner, M. C.	Knox	R. 3	Noland, W. O.	North Judson . . .	R. D
Boner, M. H.	Knox	P.-M. D	Parker, J.	Ora	P.-M. D
Coffin, Ellen	Davis	R. 10	Waddell, C.	North Judson . . .	R. D
Glazebrooke, L. D. . .	Knox	R. 10	Wright, M. R.	Knox	E. 10
Henderson, Alex. H. .	Knox	R. 10			

Regular, 10; Physio-Medical, 4; Eclectic, 1. Total, 15.

Steuben County.

Abbott, Lyman. . . .	Fremont	R. D	McNabb, T. B. . . .	Fremont	R. D
Cameron, John F. . .	Hamilton.	R. D	Nichols, H. A. . . .	Flint	R. D
Creel, T. J.	Angola	R. D	Ott, James E.	Ashley	R. D
Cunningham, H. L. .	Salem Center. . . .	R. D	Penton, Geo. E. . . .	Angola	R. D
Dolph, C. M.	Pleasant Lake . . .	R. D	Ran-burg, M. V. . . .	Salem Center. . . .	R. D
Fuller, S. H.	Pleasant Lake . . .	R. D	Stauffer, E. R. . . .	Fremont	R. D
Goodale, Chas. W. . .	Metz	R. D	Sherman, Fred	Jamestown.	E. D
Gibbs, O. H.	Hamilton.	E. D	Sherrow, Wm. E. . . .	Salem Center. . . .	E. D
Griswold, E. H. . . .	Ashley	R. D	Smith, A. D.	Angola	H. D
Hamilton, Frank. . .	Hudson.	R. D	Sanborn, P. P. . . .	Angola	H. D
Helene, A. M.	Orland	— 10	Taylor, E. A.	York	R. D
Humphrey, Frank . .	Fremont	R. D	Wood, H. D.	Angola	R. D
Keesler, George . . .	Orland	N. R.	Wood, T. F.	Angola	R. D
Kinsey, J. C.	Hudson.	— 10	Waller, W. H.	Angola	R. D
Kimmel, A. J.	Hudson.	R. D	Williams, T. B. . . .	Angola	R. D
Leas, E. R.	Angola	H. 3	Wilkinson, J. J. . . .	Orland	— 10
LANE, W. H.	Angola	R. D	Leasure, Lida	Angola	R. D
Morr, J. E.	Orland	R. D	Green, M.	Pleasant Lake . . .	— 10

Regular, 23; Homeopathic, 3; Eclectic, 3; not reported, 4. Total, 33.

St. Joseph County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>N. mes.</i>	<i>Postoffice.</i>	<i>School.</i>
Arlington, J. W.	Walkerton	R. D	McNamara, D. W.	South Bend.	R. D
Borley, W. E.	Mishawaka	R. D	Myers, C. H.	South Bend.	H. D
Bell, H. W.	South Bend.	R. D	Montgomery, H. T.	South Bend.	R. D
Borough, John.	Mishawaka	H. D	Moore, John	Lakeville.	R. 10
Brown, J. R.	Sumption Prairie	R. 10	Moore, Robert	Lakeville.	R. 10
Berteling, J. B.	South Bend.	R. D	Moore, Ed P.	South Bend.	R. D
Butterworth, C. M.	South Bend.	R. D	McDonald, T. L.	New Carlisle	R. 10
Burkett, W. W.	South Bend.	R. 10	Miller, A. G.	South Bend.	R. 3
Boyd-Snea, H.	South Bend.	R. D	Mitchell, H. F.	South Bend.	R. D
Bovisowicz, N. G.	South Bend.	R. D	Mitchell, C. F.	South Bend.	R. D
Barber, A. E.	Mishawaka	R. D	McAllister, E. W.	South Bend.	R. D
Campbell, A. S.	North Liberty	R. 10	McCoal, A. W.	Walkerton	R. 10
Cassidy, John	South Bend.	R. D	Osborn, G. A.	South Bend.	R. D
Chaffee, W. D.	South Bend.	H. D	Osborn, Margaret	South Bend.	R. 10
Daugherty, C. A.	South Bend.	R. D	Phillips, D. C.	South Bend.	R. D
Drallinger, E. M.	South Bend.	E. D	Pattee, J. J.	South Bend.	R. D
Devant, H. D.	Walkerton	R. D	Pierce, W. A.	Osceola	R. 3
Davis, J. H.	New Carlisle	R. D	Partridge, —	South Bend.	H. D
Dugdale, R. B.	South Bend.	R. D	Pagin, Daniel	South Bend.	R. 10
Eastman, F. P.	South Bend.	R. D	Pagin, Lewis	South Bend.	E. 10
Fink, H. A.	South Bend.	R. D	Rupp, P. E.	South Bend.	R. 10
Green, J. B.	Mishawaka	R. 10	Reece, J. N.	North Liberty	R. D
Grimes, J. F.	Mishawaka	E. 10	Rennoe, C. A.	South Bend.	R. D
Hager, W. R.	South Bend.	R. D	Ringle, C. A.	Granger	R. D
Harris, Robert	South Bend.	E. 10	Sawyer, F. M.	South Bend.	R. D
Hickman, C. J.	South Bend.	E. D	Stockwell, Sarah	South Bend.	R. D
Hill, J. W.	South Bend.	R. D	Shaffer, A. F.	South Bend.	R. D
Hill, G. S.	South Bend.	R. D	Stine, R. L.	South Bend.	H. D
Hill, Mattie	South Bend.	R. D	Stoltz, Charles	South Bend.	R. D
Jones, P. M.	Walkerton	E. D	Todd, S. G.	Mishawaka	R. D
Killmer, S. L.	South Bend.	R. D	Terry, C. C.	South Bend.	R. D
Kemble, Mrs. L.	South Bend.	R. 10	Van Riper, A. H.	New Carlisle	R. D
LYON, T. B.	South Bend.	R. D	Varier, J. A.	South Bend.	R. D
Laughton, W. R.	South Bend.	H. D	Wood, W. F.	Mishawaka	R. D
Lockwood, W. F.	Wyatt.	H. D	Waynick, J. B.	New Carlisle	H. D
Lent, E. J.	Lakeville	R. D			

Regular, 57; Eclectic, 6; Homeopathic, 8. Total, 71.

Sullivan County.

Briggs, C. F.	Sullivan	R. D	Lisman, W. A.	Carlisle	R. D
Beadell, T. S.	Dugger	R. D	Lisman, S. J.	New Lebanon	R. D
Brown, N. S.	Buel City	R. 10	Lowder, C. M.	Dugger	R. D
Bennett, J. H. R.	Farmersburgh	E. D	Murphy, J. S.	Sullivan	R. 3
Crowder, R. H.	Sullivan	R. D	Mothes, J. M.	Carlisle	E. 10
Crowley, J. B.	Sullivan	E. D	McClung, S. Y.	Pleasantville	R. D
Cushman, A.	Graysville	R. D	McKissie, O. P.	Dugger	R. 10
Davis, N. B.	Sullivan	R. 3	Neff, J. H.	Fairbanks	R. D
Denison, E. D.	Carlisle	R. 10	Neel, E. M.	Shelburn	R. D
Durham, J. L.	Graysville	R. D	Osburn, S. D.	Shelburn	R. D
Deloshmut, V. D.	Shelburn	R. D	Pirtle, G. W.	Carlisle	R. D
EDWARDS, C. H.	Sullivan	R. D	Padgett, T. J.	Pleasantville	R. D
Freeman, Joseph	Sullivan	R. D	Phillips, J. L.	Pleasantville	R. 3
Faught, W. C.	Fairbanks	R. D	Plue, G. W.	Hymers	R. D
Hinkle, J. R.	Sullivan	R. D	Stock, L. K.	Sullivan	E. D
Higbee, G. W.	Sullivan	H. D	Sheridan, A. J.	Sullivan	E. D
Higbee, J. L.	Sullivan	H. D	Stoddard, —	Merom	R. D
Highbee, C. L.	Sullivan	H. D	Thompson, J. L.	Sullivan	R. D
Hoover, L.	Paxton	R. D	Thompson, W. M.	Sullivan	R. D
Harper, H. F.	Merona	R. D	Thrawls, R. T.	Hymers	R. D
Garrison, E.	Staffordshire	R. D	Vanceve, R. H.	Farmersburgh	R. D
Jenkins, R. L.	Carlisle	R. 3	Whalen, D. M.	Carlisle	R. 10
Jackson, J. H.	Pleasantville	R. D	Yeager, E. J.	Graysville	R. D

Regular, 38; Eclectic, 5; Homeopathic, 3. Total 46.

Switzerland County.

Names.	Postoffice.	School.	Names.	Postoffice.	School.
Bear, L. H.	Vevay	R. D	Olcott, W. A.	Patriot	R. D
Benedict, John L.	Patriot	R. D	Pryor, James A.	Patriot	R. D
Copeland, R. M.	Bennington	R. D	Rous, Hannah C.	Vevay	R. D
Craig, A. G.	Vevay	R. D	Shadday, J. H.	Vevay	R. D
Culbertson, Scott.	Moorefield	R. D	SMITH, J. W.	Vevay	H. D
Dalglish, H. T.	Vevay	R. D	Thieband, Hugh M.	Vevay	R. D
Elfers, John	Fairview	R. D	Van Pelt, George W.	Vevay	R. D
Greenleaf, H. A.	Markland.	R. 3	Vanosdol, John W.	Allensville	R. D
Haydon, D. N.	Sugar Branch	R. 3	Vanosdol, Dawson D.	Allensville	R. D
Jamieson, R. A.	Patriot	R. D	Walden, James B.	Mt. Sterling	R. D
Langsdale, J. M. W.	Florence	R. D	Woollen, L. J.	Vevay	R. D
Loomis, Chas.	Florence	R. D			

Regular, 20; Homeopathic, 1; Eclectic, 2. Total, 23.

Tippecanoe County.

Ackerman, August C.	Lafayette.	H. D	Motter, Thomas S.	Dayton	R. 10
Alexander, Wilbur.	Montmorenci.	R. D	McBride, Wm. F.	Dayton	R. D
Anderson, James H.	Colburn.	R. D	McCray, W. F.	Clark's Hill	N. R
Boss, Samuel Q.	Lafayette.	R. D	Nesbit, William S.	Monitor	R. D
Baugh, Samuel L.	Farmers Inst.	R. D	Ogborn, Job O.	Lafayette	R. 10
Beasley, George F.	Lafayette.	R. D	Peters, Walter H.	Lafayette	R. D
Biddle, Frank M.	Battle Ground	R. D	Potel, Christian	Lafayette	R. D
Boyd, Benjamin H.	Lafayette	R. D	Powers, Ed. D.	Lafayette	R. D
Brown, W. W. C.	Lafayette	R. 10	Pyke, Albert D.	Romney	R. D
Burns, George W.	No. 10.	E. 10	Riddle, H. D.	Battle Ground	R. D
Campbell, Wm. S.	West Point	R. D	Rodenhins, Everet	Lafayette	R. D
Charles, Robert E.	West Point	R. 10	Schaible, Emil	Lafayette	R. D
Charter, John H.	Lafayette	R. D	Seawright, Sam'l R.	Lafayette	R. D
Crider, George W.	Buck Creek	R. D	Shill, Charles W.	Lafayette	R. D
Crouse, Jerome H.	Dayton	R. D	Shoup, Albert W.	Battle Ground	R. D
Davidson, Edward C.	Lafayette	R. D	Simison, John	Romney	R. 10
Dienhardt, Michael	Lafayette	E. 10	Simison, Frank J.	Romney	R. D
Driscoll, Charles C.	Lafayette	R. D	Smith, John M.	Lafayette	H. D
Dunbar, James	Battle Ground	R. 10	Snyder, Leander	Lafayette	R. 10
Fickle, James M.	Stockwell	E. D	Swisher, Francis W.	Clark's Hill	P.-M. D
Fox, Stiles R.	Lafayette	R. 3	Taylor, William R.	Clark's Hill	R. D
Green, Leonard T.	Odell	R. D	Tea, Roger S.	Lafayette	R. D
Harbaugh, A. C.	Lafayette	R. D	THROCKMORTON, GEO. K.	Lafayette	R. D
Harrold, Alphons R.	Stockwell	P.-M. D	Tilson, Washburn	Lafayette	H. D
Helfrich, Harry J.	Lafayette	R. D	Tresch, Philip J.	Lafayette	R. D
Hillis, James D.	Lafayette	R. D	Vinnedge, Wm. W.	Lafayette	R. D
Hines, Fred T.	W. Lafayette	R. D	Walker, Wm. S.	Lafayette	R. D
Hopper, Milton S.	Lafayette	R. D	Washburn, Geo. W.	Lafayette	R. D
Hupe, Charles	Lafayette	R. D	Washburn, Sam'l S.	Lafayette	R. 10
Irwin, Luther M.	Lafayette	R. D	Webster, John C.	Lafayette	R. D
Keiper, George F.	Lafayette	R. D	Wells, Albert A.	Lafayette	R. D
Kirkpatrick, Geo. W.	Lafayette	R. 10	Westfall, Arthur B.	Lafayette	R. D
Koonse, Jeremiah P.	Lafayette	E. D	Wetherill, R. B.	Lafayette	R. D
Lairy, Manson	Lafayette	R. D	Yager, J. W.	W. Lafayette	R. D
Littell, John V.	Lafayette	R. D	Yeakel, David T.	Lafayette	R. D
Lockhart, A. S.	Stockwell	R. D	Yonkey, Wm. P.	Lafayette	R. D
Moffitt, William R.	W. Lafayette	R. D			
Miller, William H.	Lafayette	R. D			

Regular, 62; Homeopathic, 3; Eclectic, 6; Physio-Medical, 2; not reported, 1. Total, 74.

Tipton County.

Amos, Edward M.	Kempton	R. D	Newcomer, M. V. B.	Tipton	R. D
Austin, Winsor	Windfall	R. 10	Powell, Jas. R.	Tipton	R. D
Allen, William E.	Tipton	D. D. S. D	Ploughe, Monroe L.	Goldsmith	R. D
Cochran, Thomas C.	Sharpville.	R. D	Racobs, Robert M.	Tipton	R. D
Collins, George M.	Tipton	R. D	Read, Horace G.	Tipton	R. D
Cooper, John	Groomsville. P.-M. D		Rubush, Paul D.	Sharpville	R. 3
Doan, Nathan W.	Curtisville	R. 10	Repp, George R.	Tipton	R. D
DICKEY, A. S.	Tipton	R. D	Ross, L. N.	Ekin	E. 10
Goar, Charles S.	Goldsmith	R. D	Roads, Anna E.	Tipton	— 10
Gossett, Lucy A.	Kempton	E. D	Spitzmesser, John L.	Windfall	E. 10
Hildnep, J. R.	Windfall	P.-M. D	Somers, Jos. A.	Nevada.	R. 10
Huron, Willis B.	Tipton	H. D	Tressider, James T.	Tipton	— D
Jessup, John T.	Curtisville	R. D	Tressider, Sarah E.	Tipton	— D
King, Frank B.	Windfall	R. D	Vickrey, M. V. B.	Tipton	R. D
Longfellow, T. W.	Hobbs.	R. D	Whelchell, Thomas C.	Goldsmith	R. 10
McCreary, Oliver P.	Windfall	R. 3	Wood, George C.	Windfall	R. D
McHugh, J. R.	Windfall	P.-M. D	Woodruff, I. H.	Tipton	D. D. S. D
McHugh, Mattie C.	Windfall	P.-M. D			

Regular, 22; D. D. S., 2; Physio-Medical, 4; Eclectic, 3; not reported, 3; Homeopathic, 1. Total, 35.

Union County.

Names.	Postoffice.	School.	Names	Postoffice.	School.
Davis, O. M.	Liberty	R. D	Morris, J. E.	Liberty	R. D
FOSDICK, A. C.	Liberty	R. D	Pigman, G.	Liberty	H. D
Hawley, S. D.	Liberty	R. D	Rife, J. J.	Boston	R. D
Kell S D	Liberty	R. 10	Sigler, G. A.	Liberty	R. D
Laniger, J. M.	Billingsville	R. D	Shrinar, W. W.	Liberty	P.-M. D
Lorimer, J. D.	College Corner	R. D			

Regular, 9; Homeopathic, 1; Physio-Medical, 1. Total, 11.

Vanderburgh County.

Achilles, E. W.	Evansville	R. D	Linthicum, E.	Evansville	R. D
Armistead, H. W.	Evansville	R. D	McCLURKIN, J. C.	Evansville	R. D
Bacon, C. P.	Evansville	R. D	Martin, Geo. E.	Evansville	R. D
Begley, B. W.	Inglefield	R. D	Martin, W. H.	Evansville	R. D
Buckley, J. F.	Evansville	R. D	McCoy, P. Y.	Evansville	R. D
Bitz, L. B.	Evansville	R. D	McCutchan, C. J.	Evansville	R. D
Blount, J. F.	Evansville	R. D	McMahan, C. Agnes	Evansville	R. D
Bray, M. J.	Evansville	R. D	McGraw, G. W.	Evansville	R. 10
Brose, L. D.	Evansville	R. D	Macer, Thos.	Evansville	E. D
Bryan, Auth H.	Evansville	R. D	Minton, J. C.	McCutchanville	R. D
Bryan, T. L.	Evansville	R. D	Montoux, G. C.	Kasson	R. D
Buckner, G. W.	Evansville	E. D	Moore, D. A.	Evansville	R. 3
Busse, E. P.	Evansville	R. D	Muhlhausen, M.	Evansville	R. D
Cook, W. A.	Evansville	R. D	Musgrave, S. D.	Evansville	H. D
Cantrall, Francis A.	Evansville	R. D	Myler, J. M.	Evansville	—
Castle, James.	Evansville	R. D	Nenecker, Henry	Evansville	R. D
Clippinger, W. F.	McCutchanville	R. D	Nanney, W. H.	Evansville	R. D
Cluthe, C. F.	Evansville	R. D	Owen, J. E.	Evansville	R. D
Compton, F. S.	Evansville	R. D	Oehlman, C.	St. Joseph	R. D
Compton M. J.	Evansville	R. D	Phipps, J. M.	Evansville	—
Compton, J. W.	Evansville	R. D	Pirnat, Jno	Evansville	R. D
Corlen, R. M.	Evansville	R. D	Pollard, W. S.	Evansville	R. D
Cox, D. A.	Howell	R. D	Powell, T. E.	Evansville	R. D
Cleveland, W. F.	Evansville	R. D	Prichett, W. S.	Evansville	R. D
Cosby, Geo. P.	Evansville	R. D	Rumier, J. W.	Evansville	—
Cottingham, I. G.	Evansville	R. D	Ralston, W. G.	Evansville	R. D
Carrington, P. M.	Evansville	R. D	Reavis, W. J.	Evansville	R. D
Davis, F. L.	Evansville	H. D	Rose, B. S.	Evansville	R. D
Day, B. J.	Evansville	R. D	Rose, W. B.	Evansville	R. D
Dixon, H. T.	Evansville	R. D	Rhodes, R. R.	Evansville	H. D
Dunlery, G. C.	Evansville	H. D	Sessions, S. K.	Evansville	R. D
Doyle, John	Evansville	E. D	Stark, J. W.	Evansville	R. D
DuBois, G. M.	Evansville	R. D	Sawyer, F. W.	Evansville	R. D
Fischer, J. W.	Evansville	R. D	Steffert, A. H.	Evansville	R. D
Fritsch, Ludwig	Evansville	R. 10	Smith, H. T.	Evansville	R. D
Fritsch, W. A.	Evansville	R. D	Smith, T. S.	Evansville	R. D
Graham, J. J.	Evansville	E. 10	Schultz, Theo	Evansville	H. 10
Gilbert, W. H.	Evansville	R. D	Snyder, Kath. S.	Evansville	R. D
Glover, J. F.	Evansville	R. D	Sniter, Wilhelmina	Evansville	R. 10
Gilbert, G.	Evansville	R. 10	Stieler, Maria	Evansville	R. 10
Green, W. S.	Evansville	R. 3	Todd, S. C.	Evansville	E. D
Gumaer, C. H.	Evansville	R. D	Thomas, James	Evansville	R. D
Harrod, C. L.	Evansville	R. D	Thomas, A. J.	Evansville	R. D
Harpole, C. B.	Evansville	H. D	Taylor, T. H.	Evansville	H. D
Hartloff, Rich.	Evansville	R. D	Tedington, Flora	Evansville	R. 10
Hayden, A. M.	Evansville	R. D	Tepe, Geo. W.	Evansville	R. D
Hayward, L. F.	Evansville	R. D	Viehe, C. G.	Evansville	E. D
Hodson, Geo. P.	Evansville	R. D	Varner, Geo. W.	Evansville	R. D
Hooker, H. H.	Oakdam	R. D	Viehe, C. H.	Evansville	H. D
Illing, A. F.	Evansville	R. 10	Vincent, S. T.	Evansville	R. D
Jones, J. N.	Evansville	R. D	Walker, Edwin	Evansville	R. D
Jay, J. P.	Evansville	R. D	Walk, C. B.	Evansville	H. D
Jacobsohn, Jos	Evansville	R. D	Weever, J. B.	Evansville	R. D
Jones, F. M.	Evansville	R. D	Wertz, Tollivar	Evansville	R. D
Jones, W. F.	Evansville	R. D	Witting, A. P.	St. Joseph	R. D
Kerth, J. H.	Evansville	R. D	Wilton, Isaiah	Evansville	R. D
Knapp, A. J.	Evansville	R. D	Whistler, L. M.	Evansville	H. D
Knapp, Chas.	Evansville	R. D	Worsham, Ludson	Evansville	R. D
Laval, W. J.	Evansville	R. D	Young, G. M.	Evansville	R. D
Le Hardy, J. C.	Evansville	R. D			

Regular, 101; Eclectic, 4; Homeopathic, 10; not reported, 3. Total, 118.

Vermillion County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Aikman, E. A. . . .	Clinton. . . .	R. D	Patterson, W. P. . .	Toronto	R. 3
Bogart, J. H. . . .	Clinton. . . .	R. D	Pinson, James . . .	Clinton. . . .	R. D
Barnes, J. A. . . .	Perrysville. . .	R. D	Ray, D. V.	Gessie	R. D
Darrock, W. P. . .	Cayuga	R. D	Shepard, Hiram . .	Dana	R. D
Davidson, N. W. . .	Perrysville. . .	R. 10	Shepard, Lewis. . .	Dana	—
Hall, M. L.	Newport	R. D	Sabin, A. E.	Perrysville . . .	R. D
Hall, W. I.	Gessie	R. D	Swain, J. R.	Dana	R. 3
Harrison, J. C. . .	Hillsdale. . . .	E. 10	SANDERS, F. E. . .	Perrysville . . .	R. D
Hood, T. C.	Dana	R. D	Swain, J. R.	Dana	R. 10
Keyes, O. M. . . .	Dana	R. D	Wallace, James. . .	Newport	R. D
Kindermann, Alex. .	Eugene.	R. D	Walton, J.	Clinton.	R. D
Lownsdale, Thos. .	St. Bernice . . .	R. D	Washburn, Aquilla. .	Clinton.	R. D
McKeil, W. K. . . .	Perrysville . . .	R. 10	Webb, James	Perrysville . . .	R. 10
Mack, Erastus . . .	Hillsdale. . . .	E. 10	White, Chas. M. . .	Clinton.	R. D
Nebeker, Henry . .	Clinton.	R. D	Morgan, J. H. . . .	Clinton.	R. 10
Newton, G. O. . . .	Dana	R. D	Casebeer, J. W. . .	Hillsdale	R. D
Newton, Tenbrook .	St. Bernice . . .	R. D			

Regular, 30; Eclectic, 2; not reported, 1. Total, 33.

Vigo County.

Askrim, C. F. . . .	Terre Haute . . .	R. D	Mayfield, Thos. B. .	Terre Haute . . .	R. D
Armstrong, W. P. .	Terre Haute . . .	R. D	McCarty, J. W. . . .	Terre Haute . . .	N. R
Baldridge, J. H. .	Terre Haute . . .	E. D	Melton, S. B. . . .	Fontanet	R. 3
Ball, C. T.	Terre Haute . . .	R. D	Mormatz, A. G. . . .	Terre Haute . . .	N. R
Ball, L. S.	Prairieton	R. D	Moore, Wilson	Terre Haute . . .	H. D
Baker, W. H. . . .	Terre Haute . . .	H. D	Moore, Wilmot. . . .	Terre Haute . . .	H. D
Bell, W. E.	Terre Haute . . .	R. D	Morehead, T. W. . .	Terre Haute . . .	R. D
Bennett, S. W. . . .	New Goshen . . .	E. D	McClain, Leslie. . .	Terre Haute . . .	R. D
Belt, Richard. . . .	W. Terre Haute. .	E. 10	McAllister, Ed. B. .	Terre Haute . . .	R. D
Blake, Geo. S. . . .	Terre Haute . . .	R. D	McJohnston, A. D. .	Pimento	R. D
Brown, Theo. F. . .	Sanford.	R. D	McLaughlin, J. . . .	Seeleyville . . .	R. D
Brunker, J. W. . . .	Riley	R. D	Nichols, Wm. E. . .	Terre Haute . . .	R. D
Burris, S. O. . . .	Seeleyville . . .	R. D	Nibleck, E. S. . . .	Terre Haute . . .	R. D
Byers, W. R.	Terre Haute . . .	R. D	Patton, Madge L. . .	Terre Haute . . .	R. D
Cabell, Abram S. . .	Terre Haute . . .	R. D	Payne, A. T.	Terre Haute . . .	R. D
Caldwell, H. H. . .	Terre Haute . . .	R. D	Parker, O. O.	Terre Haute . . .	N. R
Carson, J. C. . . .	Middletown . . .	R. 3	Pence, Allen	Terre Haute . . .	E. D
Carson, L. E., Sr. .	Prairieton	R. D	Pike, Lyman	Terre Haute . . .	P. M. D
Collins, W. O. . . .	Pimento	R. D	Pinson, J. A.	Terre Haute . . .	R. D
Combs, W. R. . . .	Terre Haute . . .	R. D	Rice, S. M.	Terre Haute . . .	R. D
Crapo, G. W.	Terre Haute . . .	R. D	Reinwick, R. W. . .	Terre Haute . . .	R. D
Crapo, J. R.	Terre Haute . . .	R. D	Richardson, L. C. .	Terre Haute . . .	P. M. D
Crooks, J. H. . . .	Coal Bluff	E. D	Roberts, W. H. . . .	Terre Haute . . .	R. D
Crosier, W. J. . . .	Terre Haute . . .	N. R	Rowe, Thos. C. . . .	Coal Bluff . . .	R. D
Cushman, D. W. . .	Cloverland	E. D	Russell, C. W. . . .	Riley	R. D
Davis, W. S.	Terre Haute . . .	R. D	Rinerson, B. F. . . .	Prairie Creek. . .	R. D
Dooley, R. L. . . .	Terre Haute . . .	R. 3	Schell, W.	Terre Haute . . .	R. D
Dolson, J. B. . . .	Pimento	R. 10	Shaley, F. W.	Terre Haute . . .	R. D
Dowell, Solomon . .	Middletown . . .	R. 10	Smick, C. M.	Terre Haute . . .	R. D
Drake, J. F.	Youngstown . . .	R. D	Smith, E. W.	Terre Haute . . .	E. D
Drake, T. A.	Prairieton	R. D	Spain, A. W.	Terre Haute . . .	R. D
Drake, T. G.	Prairieton	R. D	Spaulding, Thos. C. .	Terre Haute . . .	R. D
Dupuy, Chas. M. . .	Riley	R. D	Spaulding, Jno. . . .	Terre Haute . . .	R. D
Elder, W. R.	Terre Haute . . .	H. D	Spottswood, E. T. .	Terre Haute . . .	R. D
Eichelberger, W. C. .	Terre Haute . . .	R. D	Stark, W. J.	Fontanet.	R. D
English, J. P. . . .	Terre Haute . . .	R. D	Standacker, A. E. . .	Terre Haute . . .	R. D
Erskim, A. C. . . .	Terre Haute . . .	R. D	Stunkard, T. C. . . .	Terre Haute . . .	R. D
Evans, E. M.	Terre Haute . . .	H. D	Stephens, E. H. . . .	Terre Haute . . .	H. D
Ferris, W. W. . . .	Terre Haute . . .	R. D	Swafford, B. F. . . .	Terre Haute . . .	R. D
Foot, Zibe.	Lewis.	R. 10	Swop, J. H.	Sanford.	R. 10
Gerstmeyer, Chas. .	Terre Haute . . .	R. D	Talbot, J. M.	Prairie Creek. . .	R. 10
Givens, C. C. . . .	Lewis.	R. D	Thompson, H. H. . .	Terre Haute . . .	H. D
Gilmore, —	Terre Haute . . .	R. D	Tomlin, Ben	Terre Haute . . .	R. D
Glover, E. E. . . .	Terre Haute . . .	R. D	Warden, Chas. D. . .	Terre Haute . . .	H. D
Graham, T. B. . . .	Farmersburg . . .	R. D	Waters, M. H. . . .	Terre Haute . . .	H. D
Hanes, D.	Terre Haute . . .	E. 10	Watkins, S.	Edwards	R. D
Haworth, W. W. . .	Terre Haute . . .	R. D	Weinstein, L. J. . . .	Terre Haute . . .	R. D
Hiatt, Rufus	Lewis.	R. D	Wideman, F. E. . . .	Terre Haute . . .	R. D
Hume, H. C.	Terre Haute . . .	R. D	Wier, S. D.	Terre Haute . . .	R. D
Hunt, J. S.	W. Terre Haute. .	R. D	Willeon, L. J.	Terre Haute . . .	R. D
Jenkins, W. O. . . .	Terre Haute . . .	R. D	WILLIS, JAMES R. .	Terre Haute . . .	R. D
Larkins, E. L. . . .	Terre Haute . . .	R. D	Wood, Anna	Terre Haute . . .	R. D
Langhead, J. S. . .	Terre Haute . . .	R. D	Worrell, J. P. . . .	Terre Haute . . .	R. D
Link, Jno. E.	Terre Haute . . .	R. D	Wyeth, Chas	Terre Haute . . .	R. D
Mason, J. C.	Prairieton	R. D	Young, Stephen J. . .	Terre Haute . . .	R. D
Mason, T. A.	Terre Haute . . .	R. D	Zimmerman, Chas. .	Terre Haute . . .	R. D
Mattox, W. R. . . .	Terre Haute . . .	R. D			

Regular, 89; Eclectic, 8; Homeopathic, 8; Physio-Medical, 2; not reported, 4. Total, 111.

Warrick County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Beeler, Jerome S.	Boonville	H. D	Loke, Geo	Newburg	R. D
Brown, Lee	Heilman	R. D	Leit, O. A.	Newburg	R. D
Brown, A. P.	Wheatonville	R. D	McCoy, T. J.	Eby	R. 10
Baldwin, I. J.	Lynnville	R. D	Morganheimer, P	Chandler	R. D
Cust, Fred T.	Tennyson	R. 3	Mills, W. H.	Canal	R. D
Camp, Geo. H.	Lynnsville	E. 10	McVey, W. H.	Degonia	H. 10
Camp, Joseph W.	Lynnsville	E. 10	May, Vance	Boonville	R. D
Camp, Wm. O.	Dickeysville	E. 10	Newton, Grant	Boonville	H. D
Camp, W. F.	Lynnville	E. 3	Pogue, Henry	Boonville	E. D
Cout, D. B.	Newburg	R. D	Quatte, A.	Tennyson	R. D
Dailey, W. W.	Stanley	H. 10	Rhoads, R. R.	Yankeetown	R. D
Dailey, T. J.	Boonville	R. 10	Strawl, M.	Boonville	R. D
Dubois, J. M.	Lynnville	R. 10	Slaughter, W. W.	Newburg	R. D
DeFOREST, D. A.	Boonville	R. D	Scales, T. D.	Boonville	R. D
DeForest, D. F.	Boonville	R. D	Scales, H. W.	Boonville	R. D
Ford, Wm. P.	Boonville	R. D	Sproadley, N. M.	Selvin	R. D
Howard, Thos. M.	Boonville	R. D	Sproadley, L. G.	Selvin	R. D
Hewins, W. A.	Chandler	R. D	Springston, Chas. E.	Stephenson	R. D
Hunt, W. A.	Lynnville	R. 10	Tucker, D. W.	Boonville	R. D
Heddin, G. J.	Selvin	R. 10	West, E. A.	Folsomville	R. R
Hammal, John	Lynn	R. R	Wilson, Wesley	Yankeetown	R. D
Hoover, P. N.	Boonville	H. D	Wright, Thomas	Boonville	R. D
Jones, Thomas B.	Lynnville	R. D	Wilde, G. O.	Boonville	R. D
Kelley, Geo. C.	Degonia	R. D	Walden, Wm. M.	Newburg	R. D
Keegan, C. J.	Canal	R. D	Wilson, Dalton	Yankeetown	R. D
Kiefer, Chas	Newburg	R. 10	Williams, L. L.	Folsomville	R. D
Lyner, A. L.	Paradise	R. D	Zimmerman, J.	Lynnville	R. D

Regular, 43; Eclectic, 5; Homeopathic, 5. Total, 53.

Washington County.

Applegate, W. S.	Chestnut Hill	— 3	Kelley, J. F.	Livonia	R. D
Armstrong, B. M.	Fredericks'gh.	R. D	Holliday, B. M.	Livonia	R. D
Baker, T. H. B.	Pekin	R. D	McPheeters, J. S.	Hardinsburg	R. D
Bright, W. H.	Martinsburg	R. D	Martin, R. W.	Salem	R. D
Bradshaw, A. E.	Halo	R. D	Mitchell, C. J.	Canton	R. D
Barnett, J. T.	Hardinsburg	R. D	Murphy, C. W.	Salem	R. D
Bare, J. R.	Saline	R. D	Mills, Richard	Salttilloville	— 3
Barnett, Otho	Little York	R. D	Neyman, E. M. C.	Salttilloville	R. 10
Dwees, Geo. W.	Fredericks'gh.	R. 3	Oatley, John H.	New Philadel'a	R. D
Doolittle, I. H.	Campbellsb'gh.	R. D	Overman, Wm.	Salem	P.-M. D
Ferree, Isaac	Livonia	R. D	Pavnter, H. M.	Salem	R. D
Herron, T. A.	Little York	R. 3	PURKHISER, W. J.	Salem	R. D
Hancock, G. W.	Campbellsb'gh.	R. D	Rathburn, Chas	Salem	R. 10
Hobbs, H. C.	Salem	R. D	Roberts, S. A.	Campbellsb'gh.	R. D
Howard, S. B.	Kossuth	R. 3	Spurgeon, A. N.	Kossuth	R. D
Hall, I. G.	Campbellsb'h	P.-M. D	Voyles, V. A.	Salem	R. D
Hudson, L. S.	Little York	P.-M. 10	Wilson, R. J.	Salem	R. D

Regular, 29; Physio-Medical, 3; not reported, 2. Total, 34.

Wells County.

Cassell, Geo. W.	Keystone	R. 10	Morris, J.	Poneto	R. D
Caylor, J. D.	Nottingham	R. D	Metts, J. I.	Ossian	R. 10
Cook, L. H.	Bluffton	R. D	Metts, A. H.	Ossian	R. D
Davenport, E. P.	Craigville	R. 10	Morris, Thos.	Mt. Zion	R. 10
Dosler, H. L.	Poneto	R. D	McBride, J. A.	Zanesville	R. D
Fulton, G. E.	Bluffton	R. D	Neff, I. N.	Mt. Zion	R. D
FULTON, J. C.	Bluffton	R. 10	Newman, M. N.	Ossian	R. D
Garrett, E. W.	Liberty Center	R. D	Spaulding, L. A.	Bluffton	R. D
Hessler, Geo.	Toecin	R. 10	Springstead, E. A.	Bluffton	H. D
Hatfield, I. N.	Bluffton	R. D	Waldron, R. E.	Nottingham	R. 10
Horton, E. R.	Bluffton	E. D	Weer, H. H.	Bluffton	E. D
Horne, B. S.	Bluffton	R. D	Wells, —	Murray	R. D
Huffman, —	Craigville	R. D	Wilson, L. J.	Domestic	R. D
Mason, L.	Bluffton	R. D			

Regular, 25; Eclectic, 2; Homeopathic, 1. Total, 28.

Wayne County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Allen, J. B.	Hagerstown. . . .	R. D	Luken, J. H.	Richmond	R. D
Beam, A. H.	Williamsb'rg. P.-M.	D	Lettemer, F. H. . . .	Richmond	R. D
Broadwell, Wilmer. .	Cambridge City. R. D	D	Marvel, Chas.	Richmond	R. D
Boyd, H. B.	Cambridge City. R. D	D	Man, L. S.	Richmond	H. D
Bond, C. S.	Richmond	R. D	Mendenhall, W. O. .	Richmond	R. D
Benham, H. R.	Richmond	E. D	Meredith, C. F. . . .	Richmond	R. D
Ballard, N. H.	Richmond	R. D	Mitchell, E. D. . . .	Richmond	—
Bappart, A.	Richmond	R. 10	Meek, M. L.	Abington	R. D
Brown, S. L.	Richmond	R. D	Morrow, Sarah Jane.	Richmond	R. 3
Bulla, J. M.	Richmond	H. D	McDivitt, E. J. . . .	Richmond	H. D
Brown, G. T.	Richmond	R. D	McTaggart, C. R. . .	Dublin	E. D
Bushby, G. A.	Richmond	R. D	McClellan, J. S. . .	Dublin	E. D
Benton, E. A.	Greensfork	R. D	Mauk, J. R.	Cambridge City. R. D	D
Colburn, C. P.	Richmond	R. D	Neff, W. W.	Greensfork	R. 3
Christian, H. B. F. . .	Richmond	E. D	O'Leary, Arthur . . .	Richmond	R. D
Canaday, N. F.	Hagerstown	H. D	Pitman, Henderson .	Hagerstown	R. 3
Clark, J. B.	Economy	R. D	Quick, J. C.	Hagerstown . P.-M.	D
Clark E. D.	Economy	R. D	Rife, J. J.	Boston	R. D
Carpenter, D. L. . . .	Camb'dge City. N. R.	D	Ross, N. E.	Whitewater	R. D
Darnell, T. E.	Centerville	R. D	Rusk, Anna E.	Richmond . . P.-M.	D
Darnell, J.	Centerville	R. D	Robbins, G. W. . . .	Richmond	R. D
Davis, T. H.	Richmond	H. D	Reynolds, Margaret J.	Richmond	H. D
Dempsey, W. S.	Richmond	R. D	Rittenhouse, H. H. .	Richmond	H. D
Ewing, W. E. G. . . .	Richmond	R. D	Spitler, C. S.	Dalton	R. D
Evans, W. H.	Boston	R. D	Stady, J. N.	Cambridge City. R. D	D
Grant, G. H.	Richmond	R. D	Swisher, Lotta D. . .	Cambridge City. R. D	D
Grosvenor, E. B. . . .	Richmond	H. D	Spees, S. D.	Richmond	E. D
Graham, W. B.	Richmond	E. 3	Stevenson, D. W. . .	Richmond	R. D
Gabel, Harrison. . . .	Centerville	R. D	Smith, S. E.	Richmond	R. D
Griffis, W. T.	Fountain City. . . .	E. D	Sweeney, I. F.	Milton	R. D
Gentle, L. M.	E. Germantown. R. D	D	Summers, J. B. . . .	Milton	R. D
Heiner, E. K.	Nettle Creek	R. D	St. Clair, J. W. . . .	Milton	R. 10
Hale, T. W.	Dublin	E. D	Swallow, J. E. . . .	Abington	R. D
Helm, W. M.	Williamsburg. . . .	E. D	Schiltneek, V. G. . .	Hagerstown	R. D
HIBBERD, J. F.	Richmond	R. D	Stotelmeyer, C. I. . .	Hagerstown	R. D
Hilliard, L. W.	Richmond	R. D	Schillinger, Richard .	Richmond	R. D
Harold, I. S.	Richmond . . P.-M.	D	Tillson, Hosea	Centerville	R. 10
Haughton, R. E. . . .	Richmond	R. D	Taylor, L. B.	Dublin	R. 10
Hobbs, M. W.	Richmond	R. D	Thurston, E. H. . . .	Hagers'own . P.-M.	D
Haynes, M. H.	Richmond	R. D	Taylor, T. W.	Fountain City	R. D
Hopkins, R. R.	Richmond	R. D	Taylor, James E. . . .	Richmond	R. D
Harter, W. W.	Hagerstown. P.-M.	D	Teague, I. C.	Richmond	H. 10
Iutze, Joseph	Richmond	R. D	Thurston, J. M. . . .	Richmond . . P.-M.	D
Johnston, M. F.	Richmond	R. D	Wampler, J. M. . . .	Richmond	R. D
Johnson, L. C.	Fountain City. . . .	R. D	Watts, E. K.	Richmond	R. D
Johnson, Rhoda B. . .	Fountain City. . . .	R. D	Weist, J. R.	Richmond	R. D
Kersey, Silas H.	Centerville	R. D	Weist, H. H.	Richmond	R. D
King, Jas. E.	Centerville	R. D	Walls, J. A.	Richmond . . P.-M.	D
Keith, H. C.	Richmond	R. D	Wright, J. E.	Cambridge City. H. D	D
Kinsey, J. H.	Richmond . . P.-M.	D	Witmer, B. M.	Milton	E. 10
Kelsey, L. S.	Richmond	R. D	Wray, Hardy	Dublin	E. 10
Lounsberg, O. W. . . .	Dublin	H. D	Zimmerman, W. W. . .	Richmond	H. D
Lowe, G. N.	Hagerstown . N. R.	D			

Regular, 70; Eclectic, 11; Homeopathic, 12; Physio-Medical, 9; not reported, 2. Total, 104.

White County.

Brockway, E. T.	Brookston	R. D	Minniek, H. R.	Idaville	R. D
Carr, James L.	Monon	R. D	Morris, —	Headley	R. D
Clark, R. J.	Monticello	R. D	Noland, J. W.	Buffalo	R. D
Clayton, Geo. R.	Monon	R. D	Palmer, R. B.	Idaville	E. 10
Cowger, S. R.	Monticello	E. D	Reed, J. H.	Burnettsville. . . .	R. D
Delzell, R. M.	Reynolds. . . .	R. 10	Robison, F. B.	Monticello	E. D
Didlake, M. T.	Monticello	R. D	Sampson, W. H. . . .	Brookston	E. 10
Grant, F. A.	Wolcott	R. 3	Scott, Caleb.	Monticello . P.-M.	10
HANMORE, J. J.	Monticello	R. D	Sluyter, S. D.	Chalmers. . . .	E. 3
Henry, L. W.	Burnettsville. . . .	R. 10	Small, H. E.	Wolcott. . . .	E. D
Jones, A. B.	Burnettsville. . . .	R. D	Spencer, Wm.	Monticello	R. D
Kelley, D. M.	Brookston	R. D	Tillet, J. A.	Buffalo	R. D
Lister, F. E.	Brookston	R. D	Trowbridge, —	Burnettsville. . . .	R. D
McAlister, J. W.	Idaville	R. D	Wilkenson, W. W. . . .	Monticello . P.-M.	D
McCann, J. D.	Monticello	E. D	Wilkenson, H. L. . . .	Monticello . P.-M.	D
McCulley, C. H.	Burnettsville. . . .	E. D			

Regular, 20; Eclectic, 8; Physio-Medical, 3. Total, 31.

Whitley County.

<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>	<i>Names.</i>	<i>Postoffice.</i>	<i>School.</i>
Ammerman, S. D.	Columbia City . . .	H. 10	Merriman, Elijah . . .	South Whitley . . .	R. D
Barnhill, W. D.	South Whitley . . .	H. D	Richards, John. . . .	Laud	R. D
Crisswell, John F. . . .	Churubusco	R. D	Schuman, O. V.	Columbia City . . .	R. D
Coyle, Wm. Henry	Hecla.	R. D	Scott, J. Wm. C.	Hecla.	R. D
Eberhart, Eli L.	South Whitley . . .	R. D	Sanders, Christopher . .	Larwill.	R. D
Greiser, F. S.	Churubusco. . . .	R. D	Squires, James W. . . .	Churubusco. . . .	R. D
Geary, J. K.	Coesse	R. D	Williams, Chas. C. . . .	Columbia City . . .	R. 10
Ireland, Martin	Columbia City . . .	R. D	Williams, Alice B. . . .	Columbia City . . .	R. D
Kirkpatrick, Daniel . . .	Larwill.	R. D	WHITE, SAMUEL R. . . .	Laud	R. D
Kithcart, Nath'l I. . . .	Columbia City . . .	R. D	Weber, Wm.	Columbia City . . .	R. D
Lafollette, Thos. J. . . .	South Whitley . . .	R. D	Webster, Monroe W. . . .	South Whitley . . .	R. D
Linville, David S.	Columbia City . . .	R. D	Webster, David E. . . .	Columbia City . . .	R. D
Linville, David G.	Columbia City . . .	R. D	Morrison, Thos. R. . . .	Churubusco. . . .	R. D
Mager, F. M.	Churubusco. . . .	R. D			

Regular, 24; Homeopathic, 2; Eclectic, 1. Total, 27.

	R.	E.	H.	PM	NR		R.	E.	H.	PM	NR
Adams	5	3	1	2	5	Lawrence	44	.	1	.	.
Allen	77	4	7	.	.	Madison.	81	5	8	12	18
Bartholomew	44	5	3	2	.	Marion	283	41	19	20	86
Benton	15	2	2	1	.	Marshall	35	8	5	1	.
Blackford . . . . .	.	.	.	.	.	Martin	12	2	.	.	.
Boone	41	2	3	4	3	Miami	32	5	3	2	.
Brown	9	1	1	1	1	Monroe	24	.	2	.	3
Carroll	17	9	1	.	3	Montg. mery	57	6	5	.	.
Cass . . . . .	.	.	.	.	.	Morgan	41	2	.	.	2
Clark	50	2	4	.	1	Newton	15	1	5	.	1
Clay	40	2	.	1	1	Noble	29	6	4	.	.
Clinton	43	5	4	2	1	Ohio	8	.	.	.	.
Crawford	19	.	.	.	3	Orange . . . . .	.	.	.	.	.
Daviess	38	4	3	.	.	Owen	28	3	.	.	.
Dearborn	40	2	3	1	.	Parke . . . . .	.	.	.	.	.
Decatur	31	6	4	.	1	Perry	19	4	.	.	1
Dekalb	33	7	2	.	.	Pike	33	4	2	.	.
Delaware	55	11	7	12	4	Porter	13	1	3	.	1
Dubois	28	2	.	.	1	Posey	39	4	1	.	.
Elkhart	59	4	11	.	.	Pulaski	17	1	1	2	.
Fayette	19	3	.	2	.	Putnam	36	2	3	1	.
Floyd	32	3	4	.	.	Randolph	39	15	3	8	.
Fountain	31	3	.	1	.	Ripley	29	6	.	1	.
Franklin	20	11	.	.	2	Rush	30	4	4	1	.
Fulton	16	7	1	2	2	Scott	9	3	.	.	.
Gibson . . . . .	.	.	.	.	.	Shelby	32	7	4	.	10
Grant	58	24	1	96	30	Spencer	30	11	4	.	.
Greene	36	4	.	.	4	Starke	10	1	4	.	.
Hamilton	43	.	2	7	5	Steuben	23	3	3	.	4
Hancock	37	7	1	2	.	St. Joseph.	57	6	8	.	.
Harrison	25	.	.	1	3	Sullivan	38	5	3	.	.
Hendricks	39	1	1	.	.	Switzerland	20	2	1	.	.
Henry	51	2	1	15	1	Tippecanoe . . . . .	.	.	.	.	.
Howard	23	7	1	.	2	Tipton	22	3	1	4	3
Huntington	44	3	4	1	1	Union	9	.	1	1	.
Jackson	41	1	.	3	.	Vanderburgh	101	4	10	.	3
Jasper	9	.	1	.	.	Vermillion	30	2	.	.	1
Jay	33	13	1	10	2	Vigo	89	8	8	2	4
Jefferson	38	1	2	.	1	Wabash . . . . .	.	.	.	.	.
Jennings	18	.	.	.	.	Warren . . . . .	.	.	.	.	.
Johnson	43	2	1	.	.	Warrick	43	5	5	.	.
Knox	50	3	1	3	.	Washington.	29	.	.	3	2
Kosciusko	32	4	5	7	6	Wayne	70	11	12	9	2
Lagrange	23	2	2	.	.	Wells	25	2	1	.	.
Lake . . . . .	.	.	.	.	.	White	20	8	.	3	.
Laporte	31	5	7	.	.	Whitley	24	1	2	.	.

MEDICAL INSTITUTIONS REPRESENTED IN THE OFFICIAL REGISTER OF PHYSICIANS.

“BASIS OF ISSUE” OF THE STATE CERTIFICATE.

1. Academy of Medicine, Paris, France.
2. Albany Medical College, Albany, N. Y.
3. American Medical College, Cincinnati, O.
4. American Medical College, St. Louis, Mo.
5. Baltimore Medical College, Baltimore, Md.
6. Beaumont Hospital Medical College, St. Louis, Mo.
7. Bellevue Hospital Medical College, New York City, N. Y.
8. Bennett College of Eclectic Medicine and Surgery, Chicago, Ill.
9. Berkshire Medical College, Pittsfield, Mass.
10. Boston University School of Medicine, Boston, Mass.
11. Botanico Medical College of Ohio, Cincinnati, O.
12. Carolinen Medico Chirurgical Institute, Stockholm, Sweden.
13. Castleton Medical College, Castleton, Vt.
14. Central Medical College, Indianapolis, Ind.
15. Central Medical College, Syracuse, N. Y.
16. Certificate of Examination of Medical Authorities, Lomsha, Russia.
17. Cleveland Medical College, Cleveland, O.
18. Chaddock School of Medicine, Quincy, Ill.
19. Charity Hospital Medical College, Cleveland, O.
20. Chenango County Medical Society, New York.
21. Chicago Medical College, Chicago, Ill.
22. College of Homeopathic Physicians and Surgeons, St. Louis, Mo.
23. College of Medicine and Surgery, Cincinnati, O.
24. College of Medicine and Surgery, Philadelphia, Pa.
25. College of Medicine, Syracuse University, Syracuse, N. Y.
26. College of Medicine, University of Nebraska, Lincoln, Neb.
27. College of Physicians and Surgeons, Baltimore, Md.
28. College of Physicians and Surgeons, Chicago, Ill.
29. College of Physicians and Surgeons, Indianapolis, Ind.
30. College of Physicians and Surgeons, Keokuk, Ia.
31. College of Physicians and Surgeons, Manitoba, Winnipeg, Ma.
32. College of Physicians and Surgeons, Montevideo, Uruguay.
33. College of Physicians and Surgeons, New York, N. Y.
34. College of Physicians and Surgeons, Ontario.
35. College of Physicians and Surgeons, Quebec.
36. College of Physicians and Surgeons, St. Louis, Mo.
37. College of Physicians and Surgeons of the Upper Mississippi, Rock Island, Ill.
38. Columbus Medical College, Columbus, O.
39. Commission of Prussian War Department, Prussia.
40. Cooper Medical College, San Francisco, Cal.

41. Dartmouth Medical College, Hanover, N. H.
42. Detroit Homeopathic Medical College, Detroit, Mich.
43. Detroit Medical College, Detroit, Mich.
44. Department of Medicine and Surgery, University of Michigan, Ann Arbor, Mich.
45. Department of Medicine, University of Pennsylvania, Philadelphia, Pa.
46. Eclectic Medical College of the City of New York, N. Y.
47. Eclectic Medical College of Pennsylvania, Philadelphia, Pa.
48. Eclectic Medical Institute, Cincinnati, O.
49. Eclectic Medical Society of the State of New York.
50. Ecole de Medicine et de Chirurgie, Montreal, Que.
51. Examining Board, Canton Aargau, Switzerland.
52. Examining Board, St. Gallen, Switzerland.
53. Examining Commission, Basle, Switzerland.
54. Examining Commission, Berne, Switzerland.
55. Faculty of Medicine, University of Bogota, U. S. of Columbia.
56. Faculty of Medicine, University of Bishop's College, Montreal, Que.
57. Fairfield Medical College, Fairfield, N. Y.
58. Fort Wayne College of Medicine, Fort Wayne, Ind.
59. Fourteenth Medical District Society of Ohio.
60. Free Medical College of New York for Women, New York, N. Y.
61. Funchal College, Maderia.
62. Geneva Medical College, Geneva, N. Y.
63. Georgia Eclectic Medical College, Atlanta, Ga.
64. Government of Canada, Montreal, Que.
65. Gross Medical College, Denver, Colo.
66. Hahnemann Medical College, Chicago, Ill.
67. Hahnemann Medical College, Philadelphia, Pa.
68. Hahnemann Medical College, San Francisco, Cal.
69. Hering Medical College, St. Louis, Mo.
70. *Homeopathic Hospital College, Cleveland, O.
71. Homeopathic Medical College, Chicago, Ill.
72. Homeopathic Medical College of Missouri, St. Louis, Mo.
73. Homeopathic Medical College of New York, New York, N. Y.
74. Homeopathic Medical College, Philadelphia, Pa.
75. Homeopathic Medical College, University of Michigan, Ann Arbor, Mich.
76. Homeopathic Medical College for Women, Cleveland, O.
77. Homeopathic Medical Department, State University of Iowa, Iowa City, Ia.
78. Hospital College of Medicine, Louisville, Ky.
79. Hospital Medical College, Evansville, Ind.
80. Humboldt Medical College, St. Louis, Mo.
81. Illinois Army Medical Examining Board, Certificate of Examination.
82. Illinois State Board of Health, Certificate of Examination.
83. Imperial Alexander University of Helsingfors, Finland.
84. Indiana Eclectic Medical College, Indianapolis, Ind.
85. Indiana Medical College, Laporte, Ind.
86. Iowa Medical College, Des Moines, Ia.
87. Jefferson Medical College, Philadelphia, Pa.
88. Kansas Board of Medical Examiners, Certificate of Examination.

* Name changed to Cleveland University of Medicine and Surgery, Cleveland, Ohio, December 22, 1893. See No. 375.

89. Kansas City College of Physicians and Surgeons, Kansas City, Mo.
90. Kansas City Medical College, Kansas City, Mo.
91. Kentucky Medical Examiners, First Judicial District.
92. Kentucky Medical Examiners, Third Judicial District.
93. Kentucky School of Medicine, Louisville, Ky.
94. Keokuk Medical College, Keokuk, Ia.
95. Kings' and Queens' College of Physicians, Ireland.
96. License of Interior Department, Grand Duchy of Baden, Germany.
97. License of Royal Medical Faculty, Stockholm, Sweden.
98. Long Island College Hospital, Brooklyn, N. Y.
99. Louisville Medical College, Louisville, Ky.
100. Marion-Sims College of Medicine, St. Louis, Mo.
101. Medical College of Alabama, Mobile, Ala.
102. Medical College of Evansville, Evansville, Ind.
103. Medical College of Fort Wayne, Fort Wayne, Ind.
104. Medical College of Georgia, Augusta, Ga.
105. Medical College of Indiana, Indianapolis, Ind.
106. Medical College of Ohio, Cincinnati, O.
107. Medical College of Virginia, Richmond, Va.
108. Medical College of the State of South Carolina, Charleston, S. C.
109. Medical Convention of Ohio, O.
110. Medical Department, Arkansas Industrial University, Little Rock, Ark.
111. Medical Department, Dartmouth College, Hanover, N. H.
112. Medical Department, Howard University, Washington, D. C.
113. Medical Department, Illinois College, Jacksonville, Ill.
114. Medical Department, Kemper College, St. Louis, Mo.
115. Medical Department, Laval University, Que.
116. Medical Department, McGill University, Montreal, Que.
117. Medical Department, State University of Iowa, Iowa City, Ia.
118. Medical Department, St. Louis University, St. Louis, Mo.
119. Medical Department, Tulane University of Louisiana, New Orleans, La.
120. Medical Department, Transylvania University, Lexington, Ky.
121. Medical Department, University of Buffalo, Buffalo, N. Y.
122. Medical Department, University of Georgetown, Washington, D. C.
123. Medical Department, University of Ghent, Belgium.
124. Medical Department, University of Iowa, Keokuk, Ia.
125. Medical Department, University of Kansas City, Mo.
126. Medical Department, University of Louisiana, New Orleans, La.
127. Medical Department, University of Louisville, Louisville, Ky.
128. Medical Department, University of Missouri, St. Louis, Mo.
129. Medical Department of the University of Nashville and Vanderbilt University, Nashville, Tenn.
130. Medical Department, University of the City of New York, New York, N. Y.
131. Medical Department, University of St. Louis, St. Louis, Mo.
132. Medical Department, University of Vermont, Burlington, Vt.
133. Medical Department, University of Virginia, Charlottesville, Va.
134. Medical Department, University of Wooster, Cleveland, O.
135. Medical Department, Western Reserve University, Cleveland, O.
136. Medical Department, Western University, London, Ont.
137. Medical Department, Willoughby University, Willoughby, O.
138. Medical Department, Willamette University, Portland, Ore.

139. Medical Department, Yale University, New Haven, Conn.
140. Medical Examiners, District of Wiina, Russia.
141. Medical Examining Commission, Berlin, Germany.
142. Medical School of Harvard University, Boston, Mass.
143. Medical School of Maine, at Bowdoin College, Brunswick, Me.
144. Medical School, University of Missouri, Columbia, Mo.
145. Medical Department, University of Missouri, St. Louis, Mo.
146. Medical Society of Lewis County, N. Y.
147. Medico-Chirurgical College, Philadelphia, Pa.
148. Meharry Medical Department, Central Tennessee College, Nashville, Tenn.
149. Memphis Hospital Medical College, Memphis, Tenn.
150. Memphis Medical College, Memphis, Tenn.
151. Metropolitan Medical College, New York, N. Y.
152. Miami Medical College, Cincinnati, O.
153. Michigan College of Medicine and Surgery, Detroit, Mich.
154. Minnesota Hospital College, Minneapolis, Minn.
155. Missouri Medical College, St. Louis, Mo.
156. Nashville Medical College, Nashville, Tenn.
157. National Medical College, Washington, D. C.
158. New Jersey State Medical Society, N. J.
159. New Orleans School of Medicine, New Orleans, La.
160. New York Medical College, New York, N. Y.
161. New York Medical College and Hospital for Women, New York, N. Y.
162. New York Post-Graduate Medical School, New York, N. Y.
163. Northwestern Ohio Medical College, Toledo, O.
165. Omaha Medical College, Omaha, Neb.
166. Pennsylvania Medical College, Philadelphia, Pa.
167. Physio Medical College, Cincinnati, O.
168. Physio-Medical College of Indiana, Indianapolis, Ind.
169. Physio-Medical Institute, Chicago, Ill.
170. Physio-Medical Institute, Cincinnati, O.
171. Pulte Medical College, Cincinnati, O.
172. Queen's University, Ireland.
173. Queen's University Medical College, Toronto, Ont.
174. Queen's University, Kingston, Ont.
175. Quincy College of Medicine, Quincy, Ill.
176. Rock Island Medical College, Rock Island, Ill.
177. Rock River Medical Society, Wis.
178. Rotunda Lying-in Hospital and Institute, Dublin, Ireland.
179. Royal College of Physicians and Surgeons, Kingston, Ont.
180. Royal College of Physicians and Surgeons, Edinburg, Scotland.
181. Royal College of Physicians, London, England.
182. Royal College of Surgeons, Edinburg, Scotland.
183. Royal College of Surgeons, England.
184. Royal College of Physicians, Ireland.
185. Rush Medical College, Chicago, Ill.
186. San Carlos Medical College, Madrid, Spain.
187. Sanitary Commission, Zurich, Switzerland.
188. School of Apothecaries' Hall, Dublin, Ireland.
189. School of Medicine, University of Maryland, Baltimore, Md.
190. Sheboygan County Medical Society, Wis.

191. Society of Apothecaries, London, Eng.
192. Society of Science and Medicine, Cincinnati, O.
193. Southern Medical College, Atlanta, Ga.
194. Starling Medical College, Columbus, O.
195. State Board of Medical Examiners, Colorado.
196. State Board of Examiners, Kansas Medical Society, Kansas.
197. St. Joseph Hospital Medical College, St. Joseph, Mo.
198. St. Louis Hygienic College of Physicians, St. Louis, Mo.
199. St. Louis Medical College, St. Louis, Mo.
200. St. Paul Medical College, St. Paul, Minn.
201. Swiss Medical College, Zurich, Switzerland.
202. St. Petersburg Medico-Chirurgical Academy, St. Petersburg, Russia.
203. Syracuse Medical College, Syracuse, N. Y.
204. Toronto School of Medicine, Toronto, Ont.
205. Trinity College, Dublin, Ireland.
206. Trinity Medical School, Toronto, Ont.
207. United States Army Medical Examining Board, St. Louis, Mo.
208. United States Medical College, New York, N. Y.
209. University of Basle, Switzerland.
210. University of Berlin, Germany.
211. University of Berne, Switzerland.
212. University of Bonn, Germany.
213. University of Breslau, Germany.
214. University of Buda-Pesth, Hungary.
215. University of Charkov, Russia.
216. University of Christiana, Norway.
217. University of Copenhagen, Denmark.
218. University of Dorpat, Russia.
219. University of Edinburg, Scotland.
220. University of Erlangen, Germany.
221. University of Freiburg, Germany.
222. University of Genoa, Italy.
223. University of Giessen, Germany.
224. University of Glasgow, Scotland.
225. University of Gottingen, Germany.
226. University of Griefswald, Germany.
227. University of Halle, Germany.
228. University of Heidelberg, Germany.
229. University of Innsbruck, Austria.
230. University of Jena, Germany.
231. University of Keil, Germany.
232. University of Leipzig, Germany.
233. University of Marburg, Germany.
234. University of Moscow, Russia.
235. University of Munich, Germany.
236. University of Naples, Italy.
237. University of Prague, Austria.
238. University of Strasburg, Germany.
239. University of Sucre, Bolivia.
240. University of Trinity College, Toronto, Ont.
241. University of Toronto, Toronto, Ont.

242. University of Tübingen, Germany.
243. University of Victoria College, Toronto, Ont.
244. University of Vienna, Austria.
245. University of Warsaw, Russia.
246. University of Würzburg, Germany.
247. University of Zürich, Switzerland.
248. Vermont Medical College, Woodstock, Vt.
249. Victoria University of Coburg, Canada.
250. Washington University School of Medicine, Baltimore, Md.
251. Western College of Homeopathic Medicine, Cleveland, O.
252. Woman's Medical College of Baltimore, Baltimore, Md.
253. Woman's Medical College of Chicago, Chicago, Ill.
254. Woman's Medical College of Pennsylvania, Philadelphia, Pa.
255. Woman's Medical College of the New York Infirmary, New York, N. Y.
256. Worcester Medical College, Worcester, Mass.
257. Years of Practice in Illinois.
258. Ashtabula Medical Society, Ohio.
259. Board of Medical Examiners, Erlangen, Germany.
260. California Medical College, San Francisco, Cal.
261. Central College of Physicians and Surgeons, Indianapolis, Ind.
262. Certificate of Examination, Canton of St. Gallen, Switzerland.
263. Certificate of Examination, Canton of Graubünden, Switzerland.
264. Certificate of Examination, Basle, Switzerland.
265. College of Medicine and Surgery, Minneapolis, Minn.
266. College of Physicians and Surgeons of Lower Canada.
267. Downing Medical College, England.
268. Worthington Medical College, Worthington, O.
269. Eclectic Medical College of Philadelphia, Pa.
270. Georgia College of Eclectic Medicine and Surgery, Atlanta, Ga.
271. Hershel's Homeopathic Institute, Dresden, Germany.
272. Hygeo-Therapeutic College, New York, N. Y.
273. Indiana Army Medical Examining Board.
274. Iowa College of Physicians, Des Moines, Ia.
275. Kansas Medical College, Independence, Kansas.
276. License of the Province of Canada.
277. License of Massachusetts Medical Society.
278. McGill University, Faculty of Medicine, Montreal, Quebec.
279. Medical Board, Province of Ontario, Canada.
280. Medical Council of Zürich, Switzerland.
281. Medical Department of Butler University, Indianapolis, Ind.
282. Medical Department of Lind University, Chicago, Ill.
283. Medical Department of Pennsylvania College, Gettysburg, Pa.
284. Medical Department of the University of Nashville, Nashville, Tenn.
285. Medical Department of the University of Tennessee, Nashville, Tenn.
286. Medical Department of the University of North Carolina, Chapel Hill, N. C.
287. Medical Department, Western Reserve College, Hudson, O.
288. Medical Examining Committee, Rostock, Russia.
289. Michigan College of Medicine, Detroit, Mich.
290. Penn Medical University, Philadelphia, Pa.
291. Royal Academy of Erlangen, Germany.
292. Royal Bavarian Examining Commission, Erlangen, Germany.

293. Royal College of Edinburg, Scotland.
294. Royal Examining Commission, Berlin, Germany.
295. State Medical Society of Illinois.
296. St. Louis College of Homeopathic Physicians and Surgeons, St. Louis, Mo.
297. Western Reserve College, Hudson, O.
298. University of Aberdeen, Scotland.
299. University of Christian Albert, Germany.
300. University of Paris, France.
301. University of Pesth, Hungary.
302. University of St. Andrews, Scotland.
303. Vermont Academy of Medicine, Castleton, Vt.
304. Victoria University of Toronto, Ont.
305. Kentucky Medical Academy, Ky.
306. Examining Commission, Zurich, Switzerland.
307. Eclectic Medical Examining Board of Kansas.
308. Barnes Medical College, St. Louis, Missouri—supplemented by examination.
309. Baltimore University, School of Medicine, Baltimore, Md.
310. University of Turin, Italy.
311. Kentucky School of Medicine, Louisville, Kentucky—supplemented by examination.
312. St. Louis College of Physicians and Surgeons—supplemented by examination.
313. Marion-Sims College of Medicine—supplemented by examination.
314. Columbus Medical College—supplemented by examination.
315. University of Louisville, Medical Department—supplemented by examination.
316. Beaumont Medical College—supplemented by examination.
317. Northwestern Medical College of St. Joseph, Missouri—supplemented by examination.
318. Detroit College of Medicine—supplemented by examination.
319. Trinity Medical College—supplemented by examination.
320. Queen's University of Canada—supplemented by examination.
321. University of Barcelona, Spain.
322. Catholic University of Louvain, Belgium.
323. Western Pennsylvania Medical College of Pittsburgh, Pa.
324. McGill University—supplemented by examination.
325. University of Heidelberg—supplemented by examination.
326. Toledo Medical College, Toledo, O.
327. License Board of Regents, University of the State of New York.
328. American Medical College at Beirut, Syria.
329. University of Victoria College, Toronto—supplemented by examination.
330. Omaha Medical College—supplemented by examination.
331. Iowa Eclectic Medical College, Des Moines.
332. University of Upsala, Sweden.
333. College of Medicine, University of Southern California.
334. State Medical Society of Missouri.
335. Kaiser Wilhelm's University, in Strasburg.
336. Christian Albert's University, Kiel, Germany—supplemented by examination.
337. Jefferson School of Medicine, Louisville.
338. Hering Medical College and Hospital, Chicago—supplemented by examination.

339. Royal College of Surgeons and Apothecaries' Hall, at Dublin, Ireland.
340. Imperial Medical Military Academy at St. Petersburg, Russia.
341. Government Examining Board, Poland.
342. Louisville Medical College—supplemented by examination.
343. National Homeopathic Medical College, Chicago, Ill.
344. Medical Department, University of Vanderbilt, Nashville, Tennessee—supplemented by examination.
345. Eclectic College of Medicine and Surgery, Cincinnati, O.
346. Ensworth Medical College, St. Joseph, Missouri—supplemented by examination.
347. University of Toronto, Faculty of Medicine, Ontario, Canada—supplemented by examination.
348. Friedrich-Wilhelm's University, Berlin, Germany.
349. State Medical Examining Commission, Jena, Germany.
350. Northwestern Medical College, St. Joseph, Mo.
351. Medical Department, University of Nashville and Vanderbilt—supplemented by examination.
352. College of Physicians and Surgeons, Baltimore, Md.—supplemented by examination.
353. Medical Department, University of Tennessee, Nashville—supplemented by examination.
354. Hering Medical College and Hospital, Chicago, Ill.
355. American Medical College, St. Louis, Mo.—supplemented by examination.
356. National Normal University, Lebanon, O.—supplemented by examination.
357. Indiana Medical College, Indianapolis, Ind.
358. Ensworth Medical College, St. Joseph, Mo.
359. Ohio Medical University, Columbus—supplemented by examination.
360. Memphis Hospital Medical College—supplemented by examination.
361. Laval University, Medical Department, Montreal, Canada—supplemented by examination.
362. Detroit College of Medicine, Detroit, Mich.
363. Medical Department, Western University, London, Canada—supplemented by examination.
364. License of the Imperial Government of Japan.
365. Medical Department, Niagara University, Buffalo, N. Y.
366. University of Berlin, Berlin, Germany—supplemented by examination.
367. University of Maryland, School of Medicine, Baltimore—supplemented by examination.
368. University Virginia, Medical Department, Charlottesville—supplemented by examination.
369. National Normal University, Lebanon, O.
370. Medical Examining Commission, Wurzburg, Germany.
371. Royal College of Physicians and Surgeons of Edinburgh, and Faculty Physicians and Surgeons of Glasgow, Scotland.
372. Baltimore Medical College, Baltimore, Md.—supplemented by examination.
373. Barnes Medical College, St. Louis, Mo.
374. Manitoba Medical College, Winnipeg, Manitoba—supplemented by examination.
375. Cleveland University of Medicine and Surgery, Cleveland, O.
376. Kaiser Wilhelm's University in Strassburg, Germany—supplemented by examination.

APPENDIX.

[This appendix contains the matter so far as was prepared by Dr. Metcalf before his death for his report of 1895.]

MEMBERS OF BOARD.

DOUGLAS C. RAMSEY, M. D	Mt. Vernon, Ind.
L. L. WHITESIDES, M. D, VICE-PRESIDENT	Franklin, Ind.
C. N. METCALF, M. D., SECRETARY	Indianapolis, Ind.
JOHN H. FORREST, M. D	Marion, Ind.
T. HENRY DAVIS, M. D	Richmond, Ind.

Resolved, That no paper shall be published in the annual report of this Board, except such as are ordered or approved for purposes of such publication by a majority of the members of the Board, and that any such paper shall be published over the signature of the writer, who is entitled to the credit of its production as well as responsible for the statement of facts and opinions expressed therein.

MEMBERS OF THE STATE BOARD OF HEALTH AND THEIR TERM OF OFFICE.

On May 2, 1895, the Board of Appointment met in the office of the Governor to fill the vacancies in the membership of the State Board of Health created by the expiration by limitation of the term of office of Dr. John N. Taylor, of Crawfordsville and Samuel S. Roots, of Greenfield. Dr. J. H. Forrest, of Marion, and Dr. T. Henry Davis, of Richmond, were duly elected to fill the vacancies.

The newly constituted Board met in the office of the Secretary, June 6, 1895, and elected the following officers: President, Douglas C. Ramsey, M. D., Mount Vernon; Vice-President, L. L. Whitesides, M. D., Franklin. The election of a Secretary was indefinitely postponed. Therefore the terms of office are as follows:

Douglas C. Ramsey, M. D., Mount Vernon, President; term expires February 28, 1897.

L. L. Whitesides, M. D., Franklin, Vice-President; term of office expires February 28, 1897.

J. H. Forrest, M. D., Marion; term of office expires February 28, 1899.

T. Henry Davis, M. D., Richmond; term of office expires February 28, 1899.

Charles N. Metcalf, M. D., Indianapolis; term of office expired February 28, 1895. The Board failing to elect a Secretary, he holds the position in accordance with the provisions of the Constitution of the State, until his successor is elected and qualified.

STATE BOARD OF HEALTH REPORT.

HON. CLAUDE MATTHEWS,

Governor of Indiana :

Agreeable to an act passed February 19, 1891, establishing the Indiana State Board of Health, and defining its powers and duties, the Fourteenth Annual Report of this Board for the statistical year ending September 30, 1895, and for the fiscal year ending October 31, 1895, is hereby submitted.

This report contains a financial exhibit, a catalogue of the books in the library, list of pamphlets, circulars and rules and regulations issued by the Board within the year; a general outline of the work of this Department, together with such legislation recommended as the Board deems important and in the interest of public health, series of articles on hygiene and sanitary science, and subjects relating thereto, by professional men and others interested in public health; verbatim reports of contagious and infectious diseases by the Health Officers of the State; statistical tables compiled from the returns of marriages, births, deaths, contagious and infectious diseases arranged so as convey as much information as possible to those interested in the study of preventive medicine.

Much of the executive work performed by this department, questions asked, advice given, results obtained relative to drainage, ventilation and sanitary arrangements of public and private buildings, water supply of cities and towns that required attention and the abatement of various nuisances would be of little importance in a printed report. The water supply of many of the towns and cities of the State demands a scientific examination, work this Board is unable to perform because it has no funds at its command with which to do it; however, the Board has had analysis of water and inspections of localities made to determine the cause of the outbreak of epidemic diseases, a detailed report of which would be of little interest to the public, except to those living in the infected districts.

In another part of this report, under the heading of Letters from County Health Officers, will be found full reports of the epidemic diseases that made their appearance in the various parts of the State for the time embraced within the limits of this report, a history of their origin, duration of each and the means employed to suppress them.

Boards of Health are constantly being organized for work, and asking for information regarding their duties. The people are gradually being educated to understand that a large number of diseases are preventable, and have their origin in filth and unsanitary conditions, and therefore demand of Boards of Health that every possible means of relief be given them. Letters from private individuals, health officers, officers of corporations, superintendents of private and public institutions are received frequently, asking information upon all sorts of subjects relating to public health and the restriction and prevention of contagious and infectious diseases. All such communications, from whomsoever received, are given careful and respectful attention.

It is a noticeable fact that the more efficient Boards of Health are the more popular they become, as their work, in a large per cent. of instances, is appreciated, and when the laws relating to public health, and the rules issued by this Board, from time to time, are judiciously enforced, very little opposition to them is manifested. In this connection, we wish to say that there is a serious misapprehension in the minds of many health officers and citizens in regard to violations of the law affecting the public health and the punishment of the violators. The impression prevails that it is the duty of the Board to prefer charges, and assist in the prosecution. The statutes provide means for the punishment of offenders and all the machinery necessary to secure obedience to law. The grand jury, prosecuting attorneys and courts are provided for this special purpose. So far as possible, the health officers should give the regularly constituted authorities all the information possible, but here their duty ends. It too frequently occurs, however, that violators are not brought to justice because of fear or favor of the offending parties; and because of their standing in the community, and the influence they wield in politics, the offense is overlooked. Grand juries should "present no person through malice, hatred or ill will, nor leave any

unpresented through fear, favor or affection, or for any reward, or the promise or hope thereof, but present the truth, the whole truth, and nothing but the truth." Within the year it was found necessary to revise the rules and regulations of this Board that had been in force more than three years, because the meaning of many of them was not clearly understood, and were too frequently misunderstood. The revised rules and regulations are written in plain language, and no intelligent person ought to misunderstand them. Some difficulties have been encountered in past years in the enforcement of the rules of this Board because courts have held that before such rules can have any binding force in a county they must be promulgated—made known by publication in a newspaper of general circulation, over the official signature of the county health officer.

Epidemics from communicable diseases are easily prevented at the start, exactly as are conflagrations. From this standpoint health departments are like fire departments, and should always be perfectly equipped.

Following are the revised rules relating to the control of contagious and infectious diseases, and the government of town, city and county Boards of Health, and we believe it can be readily seen from a study of them, that if they are faithfully enforced by the health authorities that much sickness and financial loss to the people can be avoided.

FINANCIAL EXHIBIT.

The following is a correct statement of receipts and expenditures for the fiscal year, commencing November 1, 1894, and ending October 31, 1895: Out of the annual appropriation of \$5,000 to conduct and carry on the affairs of this department, the members of this Board have been paid their actual expenses incurred attending regular and special meetings, as well as expenses caused in making sanitary inspections of buildings under control of the State Government, as well as other outside investigations that have been required.

Reports of inspections made by members of the Board will be found in another part of this report. From the fund appropriated we pay the current expenses of the office, the Secretary and Clerks' salaries, printing bills including all publications of the Board, except the annual report, which is paid out of the General Fund.

This Board supplies all the Town, City and County Health Boards, physicians' blanks for the return of births, deaths, contagious and infectious diseases; blank transit permits for the transportation of dead bodies, and blank certificates for undertakers; preventable disease circulars for general distribution among the people; the rules and regulations of the Board for the government of physicians and health officers; programs and all necessary printing for sanitary conventions held in the State; and blanks for sanitary inspection of school houses, poor asylums and jails. After paying all bills contracted during the year, we find that the amount appropriated for this department has been entirely exhausted.

After the regular appropriation was exhausted, it was found necessary by the Board to appeal to the Governor for relief and request him to draw upon the Epidemic Fund in order to enable it to suppress small-pox that was prevailing in the State (full account of its prevalence will be found elsewhere in this report), which he did, to the amount of \$425.19.

In face of the fact that ever since the creation of the Epidemic Fund the Governor has found it necessary to draw on it to aid the Board in suppressing contagious diseases; and also in face of the appeals made, not only by the Board, but by the Governors in their annual messages to the Legislature to give

to the State Board of Health an increased appropriation to do work that it was necessary should be done, but could not be done with the meager sum of money at its disposal, the last Legislature saw proper to be parsimonious enough to reduce the appropriation for the protection of the health and lives of human beings to \$4,000.00, and give to the State Cattle Sanitary Commission an increased appropriation for the protection of health and lives of the swine and cattle of the State; and in addition to this every person who has a glandered horse, or a lumped jawed steer that is killed by the direction of the State Veterinarian, is paid out of the General Fund of the State for the slaughtering of such animal.

This Board should be given not only sufficient funds to carry on in a proper manner the regular routine affairs of the office, but it should also have sufficient funds appropriated for its use, not only to enable it to establish a laboratory for analysis of water and food, but also place it in a position to properly establish a bacteriological laboratory, so that it could make original investigations in examining into the causes of diseases. The sum should not only be large enough, so that the Board could establish these departments, but also enable it to secure a competent person to be placed at the head of each department, with a liberal salary—not an exorbitant one. There is not a State in the Union that makes any pretensions at maintaining a health department, that does not more liberally endow it in a financial way than the State of Indiana. The various amounts appropriated by the different States for the maintenance of a health department will be found elsewhere in this report.

The amount of money that this State ought to appropriate to properly equip its health department and place it alongside of the advanced position taken by other States, should not be less than \$50,000.00.

FINANCIAL EXHIBIT.

By appropriation \$5,000 00

DISBURSEMENTS.

1894.		
Nov. 1.	C. N. Metcalf, traveling and office expenses. . .	\$47 95
	D. C. Ramsey, traveling and hotel expenses . .	71 20
	J. N. Taylor, traveling and hotel expenses . . .	13 70
	L. L. Whitesides, traveling and hotel expenses .	77 60
	Estella Jackson, salary	35 00
	Mallie Metcalf, salary	50 00
	D. N. Berg, salary	83 33
	S. W. Burns, services	8 00
	Wm. B. Burford, printing and stationery . . .	280 76
Dec. 1.	D. N. Berg, salary	83 33
	Mallie Metcalf, salary	50 00
	Estella Jackson, salary	50 00
	S. W. Burns, services	8 00
1895.		
Jan. 1.	D. N. Berg, express, tel., gasoline	85
	D. N. Berg, salary	83 33
	Estella M. Jackson, salary and extra work . . .	68 00
	Mrs. Mallie Metcalf, salary	50 00
Jan. 4.	F. Will Pantzer, vaccine points	75
	C. N. Metcalf, salary	300 00
	Wyckoff, Seamens & Benedict, supplies for machine	2 30
	C. O. Probst, investigation and assessment . . .	20 00
	C. N. Metcalf, traveling expenses	181 92
	L. L. Whitesides, traveling expenses	91 15
	D. C. Ramsey, traveling expenses	100 45
	S. S. Boots, traveling expenses	74 70
	John N. Taylor, traveling expenses	142 70
	H. T. Conde, ribbon for machine	75
	S. W. Burns, services	8 00
Feb. 1.	Mrs. Mallie Metcalf, salary	50 00
	Estella Jackson, salary	50 00
	D. N. Berg, salary	83 33
	S. W. Burns, services	8 00
	Albert Sahm, P. M., postage	25 00
	C. N. Metcalf, traveling expenses	108 97
	L. L. Whitesides, traveling and hotel expenses .	14 20
	S. S. Boots, traveling and hotel expenses	5 70
	John N. Taylor, traveling and hotel expenses .	6 85
	D. C. Ramsey, traveling and hotel expenses . .	25 00
	S. W. Burns, services	8 00
	D. N. Berg, salary	83 33
	Mrs. Mallie Metcalf, salary	50 00
	Estella Jackson, salary	50 00
	D. C. Ramsey, traveling and hotel expenses . .	24 75
	S. S. Boots, traveling and hotel expenses	23 65
	L. L. Whitesides, traveling and hotel expenses .	21 20

		John N. Taylor, traveling and hotel expenses	\$27 85
April 1.		Estella M. Jackson, salary	50 00
		C. N. Metcalf, salary	300 00
		Mrs. Mallie Metcalf, salary	50 00
		D. N. Berg, salary	83 33
		S. W. Burns, services	8 00
April 18.		Albert Sahm, P. M., postage	30 00
May 1.		Estella M. Jackson, salary	50 00
		Mrs. Mallie Metcalf, salary	50 00
		D. N. Berg, salary	83 33
May 2.		Journal, subscription	10 00
		News, subscription	5 20
		Sentinel, subscription	29 00
		C. N. Metcalf, traveling expenses	61 62
		John N. Taylor, traveling and hotel expenses	27 37
		L. L. Whitesides, traveling and hotel expenses	25 00
		D. C. Ramsey, traveling and hotel expenses	50 50
		S. S. Boots, traveling and hotel expenses	11 40
		Grace B. Gibbons, services	25 00
		S. W. Burns, services	8 00
June 1.		S. W. Burns, services	8 00
		D. N. Berg, salary	83 33
		Estella Jackson, salary	50 00
		Mallie Metcalf, salary	50 00
June 6.		T. Henry Davis, traveling and hotel expenses.	10 00
		J. H. Forrest, traveling and hotel expenses.	18 00
		D. C. Ramsey, traveling and hotel expenses.	39 70
		L. L. Whitesides, traveling and hotel expenses	11 40
		C. N. Metcalf, traveling and hotel expenses	49 70
July 1.		Albert Sahm, P. M., postage.	25 00
		C. N. Metcalf, salary	300 00
		D. N. Berg, salary	83 38
		Mrs. Mallie Metcalf, salary	50 00
		Estella Jackson, salary	50 00
		S. W. Burns, services	8 00
Aug. 1.		D. N. Berg, salary	83 33
		Mrs. Mallie Metcalf, salary	50 00
		Estella M. Jackson, salary.	50 00
		S. W. Burns, services	8 00
Sept. 1.		D. N. Berg, salary	83 33
		S. W. Burns, services	8 00
		Mrs. Mallie Metcalf, salary	50 00
		Albert Sahm, P. M., postage.	25 00
Sept. 5.		C. N. Metcalf, traveling and hotel expenses	36 05
		D. C. Ramsey, traveling and hotel expenses.	25 00
		L. L. Whitesides, traveling and hotel expenses	9 50
		John H. Forrest, traveling and hotel expenses.	57 50
		T. Henry Davis, traveling and hotel expenses.	25 00
Oct. 1.		S. W. Burns, services	8 00
Oct. 16.		D. N. Berg, part salary	35 48
		Overdrawn last year	2 00

Total

\$5,000 00

CATALOGUE OF LIBRARY.

The library embraces a collection of works by recognized authorities on diseases of domestic animals, bacteria, cholera, drainage, ventilation, heating, food, hygiene, preventive medicine, sanitary science, sewers and sewage, small-pox, suicide, typhoid fever, water, zymotic diseases and miscellaneous works.

Health officers, physicians or other responsible parties desiring to pursue the study of sanitary subjects and matters relating to public health, or wish to investigate subjects of interest to this department, or to use them in discussion before societies or conventions interested in the advancement of sanitary science, can obtain the loan of any of these works by complying with the following terms:

1. Applications must be made in writing. Said application must be indorsed by the Health Officer living nearest the party making the application.

2. No more than one shall be loaned to the same person at the same time.

3. The term for which a book shall be loaned shall not exceed three weeks, but at the end of that time a renewal for two weeks more may be granted on application.

4. When a book is loaned, the Secretary shall enter upon record the name of the borrower, the title of the book, date of loan, etc.

5. The following is a complete catalogue of books belonging to the library:

TENTH CENSUS OF THE UNITED STATES.

No.

1. Tenth Census of the U. S., 1880, Vol. 4. Transportation.
- 1½. Tenth Census of the U. S., 1880, Vol. 4. Statistics of Manufactures.
2. Tenth Census of the U. S., 1880, Vol. 5. Cotton Production, Part 1.
3. Tenth Census of the U. S., 1880, Vol. 6. Cotton Production, Part 2.
4. Tenth Census of the U. S., 1880, Vol. 7. Valuation, Taxation and Public Indebtedness.
5. Tenth Census of the U. S., 1880, Vol. 8. Reports on Newspapers and Periodicals.
6. Tenth Census of the U. S., 1880, Vol. 9. Forest Trees of North America.
7. Tenth Census of the U. S., 1880, Vol. 10. Special Reports on Petroleum, Coke and Building Stone.
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10. Tenth Census of the U. S., 1880, Vol. 13. Precious Metals.
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12. Tenth Census of the U. S., 1880, Vol. 15. Mining Industries.
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19. Tenth Census of the U. S., 1880, Vol. 22. Power and Machinery Employed in Manufactures and the Ice Industry.
20. Tenth Census of the U. S., 1880. Statistics of Agriculture with Special Reports of Cereals, Flour-Milling, Tobacco and Meat Production.
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AMERICAN HEALTH PRIMERS.

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2. Animal Plagues—Geo. Fleming.
3. Animal Plagues—Geo. Fleming.
4. Animal Parasites of Sheep—Cooper Curtis.
5. Diseases of Swine and Other Domestic Animals, 1879.
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12. Swine Plague—Frank S. Billings.
13. Special Report on the Cause and Prevention of Swine Plague—Theobald Smith, Ph. B., M. D.

BACTERIA.

1. Bacteria, and the German Theory of Disease—Dr. H. Gradle.

DRAINAGE.

1. Agricultural Drainage—J. Bailey Denton, C. E.
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9. Health in Diet, Part 1.
10. Health in Diet, Part 2.
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1. Potable Water—Chas. W. Falkard.
2. Water, its Composition and Distribution—Joseph Parry, C. E.
3. Water and Water Supply—W. H. Corfield, Esq., M. A., M. D.

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2. The Art of Prolonging Life—C. W. Hufland.
3. The Cause of Color Among Races—W. Sharp, M. D.
4. Color Blindness, Its Dangers and Its Detection—Dr. Joy Jefferies.
5. Drugs that Enslave—H. H. Kane, M. D.
6. Floating Matter of the Air—John Tyndall, F. R. S.
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12. Legal Medicine, Vol. 1—Chas. Meymott Tidy, M. B. F. C. S.
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4. Sulphate of Quinine—O. F. Manson, M. D.
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6. The School Law of Indiana—J. W. Holcombe.
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In 1893, the Legislature provided for an Epidemic Fund, not to exceed fifty thousand dollars annually, for the purpose of preventing the introduction and spread of contagious and infectious diseases within the State. We believe this to be not only a wise but a necessary measure, as we consider it the part of wisdom to be prepared for such emergencies, and if so prepared, the expense of arresting an epidemic will be much less than to have to meet it without previous preparation. Every town and city in this State should enact an ordinance providing for such a fund.

This Board has long since become convinced that it is impossible, under existing laws, to collect complete statistics of marriages, births and deaths, and we do not contend that the tables herewith presented are correct. Indeed, we are satisfied that less than fifty per cent. of the deaths are reported. We have repeatedly urged upon the Legislature the importance of more stringent laws upon this subject, but as yet our labors have not been attended with success. After more than ten years of experience in the collection of mortuary statistics, we are satisfied that the remedy is, in all cases of death, to require a burial permit. In some counties statistics are fairly well secured (such counties have active, energetic health officers), but in others little or no effort whatever is made to secure them. Any one desiring information upon this point needs only to examine the reports from the different counties of the State received at this office. "The people may, with justice, require a system of registration of vital statistics—marriages, births and deaths—

(1.) "That shall accurately record the occurrence and preserve permanently and in accessible form the most important detail in every marriage, birth and death that occurs in the State;

(2.) "That the returns shall be statistically compiled in such a manner as to satisfy the demands of the people for accurate timely information in regard to the vital phenomena of statistics; and

(3.) "That the data required at State expense shall be sufficiently complete and shall be so utilized as to assist in the solution of important questions relating to the sanitary condition of the State and more especially to the occurrence, geographical distribution and progress in methods of restriction of the infectious diseases, such as small-pox, diphtheria, scarlet fever, measles, typhoid fever, and lastly, but more important than all, as regards mortality, tuberculosis.

"Our present statistics, defective as they are, often prove indispensable as evidence for the establishment of legal claims, pension allowances for widows and children of deceased soldiers and the like. It may readily be seen that a knowledge of the exact number of deaths that have occurred in each locality of the State from different causes, may be of the first importance to the local sanitary authorities, and would also be in the event of the prevalence of a great epidemic."

The only remedy by which these defective statistics can be corrected, so far as we can now see and understand, is, as has already been stated, by requiring a burial permit in each case of death.

We feel that we can congratulate the people of the State because of a year of comparative good health, which in many respects was better than the one that preceded it. Although this has been the case, it is nevertheless true that contagious diseases, which are preventable, are always present in the State. It is equally true that in nearly all cases such diseases have been better managed and more successfully controlled the past year than ever before within the history of the State, and that this result is due to better organization and consequently better results by health boards. Local Boards of Health are becoming better informed concerning the principles of preventive medicine. Statistics at home prove incontrovertibly that the number of deaths from contagious and infectious diseases is gradually decreasing, though not as rapidly as they would were the rules and regulations of this Board and proper disinfection more rigidly enforced. The failure to enforce these rules, regulations and intelligent disinfection is almost always due to negligence on the part of Boards of Health, as has been intimated before the people generally manifested a disposition to comply with any reasonable demands made upon them in matters that relate to the prevention of disease.

LOCAL BOARDS OF HEALTH.

“The Trustees of each town, the Mayor and Common Council of each incorporated city, except where a regularly constituted Board of Health, by ordinance of such city, exists, or may hereafter be created, and the Board of Commissioners of each county shall constitute a Board of Health, ex-officio, for each town, city and county respectively of the State, whose duty it shall be to protect the public health by the removal of causes of diseases when known, and in all cases to take prompt action to arrest the spread of contagious diseases, to abate and remove nuisances dangerous to the public health, and perform such other duties as may from time to time be required of them by the State Board of Health pertaining to the health of the people. They shall annually at their first meeting in December elect a secretary, who shall be the executive officer of the Board, who shall serve as such health officer for one year from the first of January next ensuing his election. He shall receive such compensation from the town, city or county treasury, respectively, as the Board electing him may determine.”

Town and city boards of health are subordinate to the county boards, and all are under the jurisdiction of the State Board. It is the duty of the secretaries of the County Boards of Health to promulgate and enforce all rules and regulations issued by the State Board for the protection of the public health, and give to this department such statistics and information as it may deem important. It is part of their duty to make reports to this office at the close of each quarter of all marriages, births, deaths, contagious and infectious diseases, and the cause of sickness occurring in the various counties; also to demand of the physicians practicing in their respective jurisdictions that they report all births and deaths happening in their practice within a period of five days after their occurrence, and also that the coroners of their counties report to them all deaths where they hold judicial investigations outside the jurisdiction of a town or city health officer, within the same period that physicians are required to report, but when such investigation is held within the corporate limits of a town or city he must make the return of death to the local officer. The

law requires that they shall promulgate and strictly enforce all rules and regulations adopted by the State Board of Health (see section 9 of the act creating the State Board of Health, passed February 19, 1891), requiring contagious and infectious diseases to be reported and quarantined as soon as recognized. One of the ablest sanitarians of the country says "the prevention and restriction of disease has become a science as exact and as definite as the scientific practice of medicine. In fact, it is now recognized as a distinct branch of medicine, and in most of our medical colleges has a special chair for the instruction of medical students. The marvelous advancement in bacteriology has revealed the exact cause of many of the diseases that affect both man and animals, and clearly shows how some of these diseases may be controlled. Therefore, the functions of a health officer have been placed upon a definite basis, requiring knowledge essential to a full understanding of the duties of a health officer, which can not be obtained in a day, or even in a year. To commence with, he should have a good education, and should be a respected citizen in the community in which he lives. He should take at least one good sanitary journal, and should study the practical literature of hygiene. He should know definitely certain things relating to all the diseases with which he may be officially brought in contact—their cause, period of incubation, usual duration, the varying degrees of convalescence, how long isolation should be maintained, the method of disinfection—in fact, should possess a knowledge of preventive medicine sufficient to direct all his official actions along exact and scientific channels. This is not less than what is or may be at any time required of a local health officer."

It should be the ambition of every health officer to familiarize himself with all the sanitary laws, rules and regulations of the State (copies of which are always furnished by this Board), and carefully study and carefully interpret, not only these, but such instructions as the State Board may issue from time to time, and require a strict compliance with the same. It annually happens that thoroughly good and efficient officers, who, in every way, understand and appreciate their duties, and are not afraid to enforce the laws, rules and regulations, and in fact, competent in every respect, are removed because their political views are different from those of the appointing

power. If civil service, which we have read so much about the past few years, should prevail anywhere, it should be in the health service of the State, and especially when it is so difficult to secure good, energetic and reliable men for the position.

They should acquaint the people with the nature and best means for the prevention of contagious and infectious diseases, and thereby prevent sickness, death and financial loss, and make every possible effort to educate the masses to the latest methods employed to preserve the public health, by distributing among them literature treating upon subjects pertaining to State sanitation. A few years ago it was stated by an able writer on sanitary affairs that "an outbreak of an infectious disease, extending beyond its first victims unchecked, is an evidence of neglect or ignorance of duty by local Boards, inexcusable, because a knowledge of methods of prevention or control, and the legal power to enforce regulations to those ends have been abundantly provided." Their duties extend to the home of every citizen residing within their respective jurisdictions, and demand the exercise of common sense and a knowledge of human nature. They are frequently called upon to make "sanitary investigations and inquiries respecting the causes of mortality, and the effects of localities, employments, conditions, ingesta, habits and circumstances on the health of the people;" examine into the condition of dwellings, tenement houses, and the water supply of towns, cities and public institutions, and consider methods to be employed for the purpose of enforcing the abatement of nuisances. In order to acceptably fill the office with benefit to the people, they must be active, persistent, energetic, faithful and fearless in the performance of their work, and possess the moral and combative courage to compel friends as well as enemies to obey the law; therefore, the position is one that ought not be filled by a "laggard," "drone," timid man or one with mercenary proclivities, who is in search of the "filthy lucre" he may be able to procure out of the position. There are many intelligent health officers in the State who come up to the standard, and meet all of the requirements, while on the other hand there is a considerable of a minority who pay very little, if any, attention to their duties, and apparently take no interest whatever in sanitary matters, making no effort to inform themselves on the simplest

laws, rules and regulations relating to public health in the State.

It is only when a great emergency arises and the citizens of their respective localities insist and demand that something be done to relieve them of an intolerable nuisance or prevent, if possible, the spread of an epidemic, that they have aroused from a lethargic state and make any kind of a pretense of performing the work required of them. Officers of this character are unquestionably the cause of the opposition and niggardly support which Boards of Health in some localities receive. Some make the excuse for neglecting their duties that they are poorly remunerated for the work required of them. Before accepting the position all are aware of the amount they are to receive, but are ignorant of the manifold requirements of the office before assuming its duties. This being true (which can be proven by many letters received), we suggest that they be forced to faithfully do their work, or else "step down and out" and let some conscientious person have the place who will attend to the demands of the office. There are many good, scientific, medical men in the State who have made great sacrifices of both time and labor in serving as secretaries of health boards, without any local encouragement from the profession or laity either in the form of thanks or sufficient remuneration. They have earnestly and conscientiously attended to their duties, nursing the hope that some day the people would be sufficiently educated to appreciate the importance of local health organizations and reasonably compensate some one in a financial way for the services rendered. The law specifically states how these officials are to be appointed and paid, but it does not state what salary they are to receive, leaving it entirely with the appointing power to fix the compensation. Experience has beyond question proven that County Commissioners, Town Trustees and City Councils are usually composed of a class of men who are too frequently influenced by the question of finance alone and leave sanitary questions to take care of themselves, until some virulent disease appears in their midst in an epidemic form. As a result of such conduct of the appointing power, many of the best men in the health service have been obliged to abandon the work, and their places have been filled with indifferent and oftentimes incompetent men—men who oppose vaccination, and say that diphtheria is not contagious. The law should be so amended

that intelligent and deserving men could be secured to fill the position who would receive a fixed and just compensation. It might be difficult to arrive at any equitable equalization of salaries. The salaries and fees of other town, city and county officials are fixed by statute; for instance, a few years ago the General Assembly created the office of County Assessor and said what his compensation should be during each year of his service. Why can it not fix the salaries of the health officers of the different counties? Perhaps the best plan would be to grade their pay according to the population, trades and business interests of the people of the different communities they are called upon to serve.

At present several of the counties give the position to the lowest bidder; in other words, they "farm it out" to some "professional mendicant" who is willing to sell himself for a "mess of pottage," therefore showing that they have no regard whatever to the qualifications of the applicants. This is, beyond doubt, an exceedingly pernicious practice, the inevitable result of which is bad and should be condemned by every reputable person in and out of the profession who is interested in the advancement of sanitary science and the preservation and promulgation of human life.

We again desire to emphasize the fact that the number of Annual Reports of this Board, as provided for by law (3,000), is altogether inadequate to meet the demands made for the reports. We are frequently in receipt of letters from various parts of the country, and, in fact, from many foreign countries, asking for copies of these reports, which we are unable to furnish owing to the limited number provided for by law, and suggest that the number ought to be increased to 10,000.

In conclusion, we regard the following suggestions in regard to legislative action as very important:

1. Requiring a burial permit in all cases of death within the State, so that this Board may be able to compile accurate mortuary statistics.
2. Providing by fees or salary for the payment of County Health Officers.
3. Vesting the appointing power and removal of County Health Officers in the State Board of Health.
4. An increase in the number of the Annual Reports from 3,000 to 10,000.

5. An increase in the annual appropriation of this Board from \$4,000 to \$50,000, so that it may be able to establish a laboratory for sanitary analysis of water, food, etc., and also one for bacteriological examinations.

6. Requiring all passenger coaches to be heated by steam.

7. Placing on the statute books the rules of the State Board of Health by an act of the Legislature.

RAILWAY SANITATION.

On account of the geographical position of our State it has necessarily become a network of railroads, with as many railways passing through it as any other State in the Union, and, therefore, the sanitary supervision of railroad property becomes an important factor, and one of vital importance to the citizens of the State; especially so, as they annually carry into and through our commonwealth thousands of immigrants from different parts of the world. It is a fact thoroughly understood by sanitarians that such diseases as small-pox, typhoid fever, yellow fever, cholera and similar contagious and infectious diseases follow the line of travel and commerce, and this is particularly true of cholera and small-pox. Therefore, health officers should make it one of their important duties yearly to make frequent, thorough and complete examinations and inspections of buildings, grounds and all other property belonging to railway corporations, and compel them to keep their property in the very best sanitary condition.

There is a passenger and freight depot in nearly every hamlet and incorporated town in the State which are visited annually by not less than two-thirds of the population of the places and surrounding country. Railway buildings, especially the passenger depots, should be properly located, heated, ventilated, cleaned and supplied with plenty of pure, wholesome drinking water. Urinals and waterclosets should be suitably situated and sufficient in number and capacity to accommodate the patrons of the roads. They should at all times be kept clean and free from offensive and deleterious odors; in fact, so clean should they be kept that the senses of delicate and sensitive persons will not be offended.

If stagnant pools and marshy places are present on the grounds they should be drained and filled up with pure, uncontaminated earth, and kept as free from garbage and filth of every character as the private grounds of the owners. The source of water supply, whether it be a spring, well, stream or lake, should be frequently and carefully examined, and should not be used if within seventy-five feet of a cesspool, privy vault or any other visible unsanitary conditions, as the liability to contamination is too great for perfect safety.

Whenever a privy vault or cesspool is found located within less than the above named distance of the water supply, it should be at once abandoned, thoroughly cleaned out, filled with dry earth, which is always an excellent purifier for foul places, and new ones properly constructed substituted in their stead, located at proper distances, made water-proof by being cemented with lime, and kept clean and inoffensive by disinfection and ventilation.

Immigrant coaches used in the transportation of that class of passengers should be properly supplied with the latest and most improved ventilators, and thoroughly cleaned and disinfected at the termination of each trip.

Saloon closets should be thoroughly ventilated and kept free from all odors, the floors should be kept well oiled and painted, so that the soaking of moisture, urine, etc., into the wood might be prevented.

All character of passenger coaches should be thoroughly and well aired, the upholstering brushed, whipped and dusted and their closets disinfected at least once each day, but the sweeping and dusting should not be done while occupied.

The bedding of sleeping cars should be carefully aired after use, as the practice of putting away blankets, sheets, pillows and other bedding into tight compartments after use over night, is highly reprehensible, and should be made a subject of sanitary investigation.

Persons suffering with contagious and infectious diseases should be prohibited by law from traveling in any railway coach.

As has been frequently stated heretofore by this Board, separate apartments should be provided for those suffering from tuberculosis, furnished with cups for the reception of sputa, and a germicide solution for the thorough disinfection of the same.

Modern research has, upon the most indisputable evidence, declared that tuberculosis is not only a communicable but a preventable disease if the proper precautions are taken, among which the destruction of the sputa is the most important.

The heating of all passenger coaches should be by steam, and not by stoves, the system now generally in use, which, besides furnishing an irregular and badly distributed heat, is also a source of great danger in case of wreck. Annually, many persons lose their lives by fire in railroad accidents, who might be rescued and their lives saved if it was not for this destructive agent. We believe that the matter of heating railway passenger coaches is a very important one, and a proper subject for legislative action.

Stock pens should be properly drained, kept dry and free from foul and offensive odors, by the use of chloride of lime or some other equally reliable disinfectant. Filthy, dirty stock cars should not be allowed to remain standing on side tracks within the corporate limits of any town or city, or near any habitation.

The greatest vigilance should be exercised by every health officer in the State, in seeing that these suggestions are rigidly enforced.

SMALL-POX AT TELL CITY, PERRY COUNTY, INDIANA.

BY WM. CLUTHE, M. D.

History.—It occurred on the 19th day of April, 1895, that Dr. F. A. Evans was called in to see Abe Montgomery, colored, twenty-six years of age, married, and expressed his suspicions to Dr. C. M. Brucker, City Health Officer, that there might be something worse than measles.

It also occurred that Drs. C. M. Brucker, W. H. Muelchi, F. A. Evans and Wm. Cluthe accidentally met at the postoffice, when it was learned that Dr. W. H. Muelchi had been attending Abe Montgomery since April 4, 1895, and that the general belief of measles and black measles could not be sustained.

Dr. Wm. Cluthe suggested that the case as described to him was too suspicious, and advised Dr. Wm. H. Muelchi to let the health officers see the case and by all means make an absolute diagnosis. This advice from the senior member of the local fraternity was cheerfully accepted, especially after expressing that he had treated small-pox cases before, and the others admitted that they never before saw a case. Very soon afterward Dr. Wm. Cluthe was summoned to meet the Health Officer and attendant physician, by order of the Health Officer, in consultation, which call was answered, but took the precaution of disinfecting himself. He positively declared same as small-pox, but to be on the safe side suggested the addition of Dr. C. H. Mason, who shortly before had located here. This also was accepted, and the result of this consultation was a unanimous diagnosis of small-pox. Just then it occurred to Dr. Wm. Cluthe that on April 17 he was called in the southern portion of the city to a place commonly called Schweitzer Hall, the description of which was now rather suspicious, but which he had not seen on account of other engagements, and suggested to see that case. Abe Montgomery resided in the so-called Becker house, on Eleventh near ———, situated in the northern portion of the city, and the distance to Schweitzer Hall is one mile. On our way the Health Officer reported the Abe Montgomery case to some members of our Common Council, sent a message to Dr. C. W. Ladd, County Health Officer, asking him to come down at once, as there was a suspicious case here (not naming small pox). The county officer resides at Cannelton, three miles southwest of Tell City, Ind. At Schweitzer Hall, Dr. C. M. Brucker, Health Officer, W. H. Mulchi and Wm. Cluthe recognized a well-marked case of small-pox on the person of Levi Fulkerson, in the front room of a second story building. He was fifteen years old, son of S. W. Fulkerson. In the rear room they found Mrs. Melinda E. Bolin, wife of Prosp. Bolin, age thirty years, in bed with the same disease. So this made three well marked cases of small-pox to begin with, and one mile apart, enough to begin active work, and in the start Dr. Wm. Cluthe was consulted eagerly and his plans were followed by the Health Officer, which were, first, isolation of those infected; second, vaccination, compulsory, to those exposed; third, quarantine domicile of those exposed; fourth, vaccination, general, of all not vaccinated.

How they contracted the disease could not be learned, as the parties interested could not be depended upon telling one story, and the presumption is that Abe Montgomery, having been employed to load railway ties in empty cars, he may have contracted it in a car, which might either have been occupied by a tramp with the poison on his person, or by merchandise of articles infected, or, as the presumption prevails, met some roustabout or deck hand exposed or infected on one of the river boats. Enough is known that he frequented at the rooms of Prosp. Bolin, where he also met the brother of Mrs. Bolin, and that Mrs. Bolin and Mrs. Fulkerson contracted the disease by direct contact with Abe Montgomery. The Health Officer called at once the members of the City Council together to meet as a board of health, and the abstract from the record will explain fully as follows:

"On April 19, 1895, a special session of the City Council was called for the purpose of taking proper steps to prevent the spread of small-pox reported to be existing in the city. Dr. C. M. Brucker, Secretary of the Board of Health, who was present, stated that there were now three (3) cases of the dread disease in the city, and as a proper means to prevent its further spread recommended that arrangements be made to secure some isolated house on the outskirts of the city and convert the same into a hospital for the proper treatment of small-pox patients. A committee was thereupon appointed to secure such a house if possible and report. Guards were ordered to be stationed at the infected places and the Secretary of the Board of Health authorized to purchase three hundred points of vaccine virus from the State Board of Health and furnish all physicians with the same, who offered to do vaccination free of charge. Adjournment was then had until 7:30 P. M."

Here I wish to mention that Hon. A. P. Fame, Mayor of Tell City, Ind., was absent, and J. B. Wishser, as President *pro tem.*, was acting Mayor. He showed himself efficient for the emergency and proceeded very soon, in company with Mike Bettinger, Councilman for the First Ward, and Charles Meyenberg, Councilman for the First Ward, as a committee, to select an empty house for hospital purposes. Just then Dr. C. W. Ladd, of Cannelton, and Health Officer of Perry County, came in in answer to C. M. Brucker's telegram. He was asked to see the cases, but he refused, and under no circumstance did he want

to enter any house to investigate and diagnose for himself the true condition of those three cases; meeting Dr. W. H. Mulchi and Dr. Wm. Cluthe, and implored by them also, he still refused, and ultimately said that as four physicians had declared it small-pox he would take their word and believe it to be small pox; and, be it stated, that he, Dr. C. W. Ladd, rode out in company with Dr. C. M. Brucker in his buggy and had no fear of contagion, but would not see the cases. Dr. Wm. Cluthe accompanied Dr. W. H. Muelchi and found the councilmanic committee, in company with Mr. Henry Bader, Chief of Fire Department of Tell City, in waiting. The result of this trip was negative. Either the premises were no account, or adjoining residents were protesting and owners refused to give them up. Then the committee and Health Officer looked over a block of ground situated at the northeastern line of the city and the last of three consecutive school blocks, each containing four acres of ground, but the ground was leased. A quick move was made and decided to build temporary wooden buildings in the street up on the summit of the hill, with no near residences, and report at the evening meeting, and the record can again speak for itself:

“Pursuant to adjournment Council was called to order promptly at the appointed time. The committee appointed to secure some houses for hospital purposes reported that no such house could be had, and recommended that a suitable building be erected at once in or near block 200 in Tell City, disannexed, which was concurred in. It was then resolved to erect the proposed building at the intersection of Sixteenth and Guttenberg streets; that the same be of frame 24x40 feet and one story in height, the city to furnish all necessary material, and that the work of erecting the same be let to the lowest bidder. Bids were then received and contracts awarded for the completion of the entire building. A committee was appointed in conjunction with the Secretary of Board of Health and authorized to purchase all the necessary supplies for the new hospital. Adjournment was then had until April 20, 1895, at 2 P. M.”

“H. J. STUEHRK, *Clerk.*”

Mr. Henry Arnot had the contract and everything was in readiness next morning to begin. In the meantime

a watchful eye was had by every one. The Secretary of the State Board of Health was notified of the status. Vaccine points were ordered and the people educated to the vaccination theory, which was not very difficult here, with a few exceptions, as Dr. Wm. Cluthe as Health Officer in 1893 had vaccinated about 150. In 1893, the city at that time, by his request, furnishing the virus, and him vaccinating free, as he expressed himself at that time, to keep up the idea of vaccination and not let its principle die out, as we may not know when we may have to deal with small-pox. As is natural, the adjacent territory knew very soon of our misfortune, and Cannelton was the first to inaugurate quarantine against us; then came the town of Troy, Ind., and the city of Louisville, Ky., with Hancock County, Ky. This was very strict, and a natural consequence of self-protection. The L. E. & St. L. R. R. officials issued orders to the local agents and their employes not to carry anybody or anything from Tell City, neither east nor west, but established the certificate system, showing bearer free from contagion. The quarantine established was most complete. Vague and wild reports sprung up almost hourly and sad scenes occurred and found firm believers, that the small-pox was even worse here than it had been in 1882 or 1883 at Cannelton, when it took many lives from their midst. Nothing was said against their right to protect themselves, by our citizens, but our own citizens and Councilmen recognized their duties and accordingly met again in Council, April 20, 1895, at the appointed time, as the records show the following:

“The guards at the infected places were placed under direct control of the Board of Health and their wages fixed for \$1.50 for every 12 hours so employed. A nurse and a physician were appointed for the Hospital, the former to receive \$5 per day, while the salary of the latter was fixed at \$15 per day. Other attendants to receive \$2.50 per day. Bids were received and contracts were awarded for furnishing the new Hospital and the Finance Committee authorized to purchase an ambulance for the conveyance of small-pox patients. Council then adjourned.

“H. S. STUEHRK, *Clerk.*”

.Sunday, Monday and Tuesday, April 21, 22 and 23, Mr. Henry Arndt and his crew were at work at the Hospital building. At

the foot of the hill a place for a well was found and water provided by digging the same. Sunday afternoon another meeting of the Council was held and ideas about the prevention of small-pox exchanged, and the condition of the other members of those three families reported.

Here it is proper to report one matter omitted: When Dr. C. M. Ladd, County Health Officer, was down April 19, 1895, the profession had a kind of a caucus, and it was agreed among themselves that harmonious action was to prevail. Dr. C. M. Brucker was to act as Health Officer for the city proper; Dr. W. H. Mulchi, because he had been exposed, alone to treat the infected persons, and Dr. Wm. Cluthe, assistant to Dr. C. W. Ladd, County Health Officer, to attend to the outskirts of the city. This last was more necessary by developments learned in the meantime, namely: The upstairs of the residence of Abe Montgomery (Becker House) was and had been used as the lodge-room of an African society (secret). Monday evening this society met, and a number of members, male and female, were present, but adjourned to meet at another house. In the meantime quite a number had visited Abe Montgomery, and some of them had stayed up with him over night. The supposition was that infection might have taken place, and all or most of them lived outside of the city. Two colored families occupied the upstairs rooms in the Schweitzer Hall, their children intermingling with those of L. W. Fulkerson and Prosp. Bolins, but immediately upon learning that small-pox had broken out in the house, left everything in the rooms, and, without waiting, ran out of the city and took refuge at the house of Sam Coleman, colored; and of those who had been up with Abe Montgomery Wednesday night, again it must be remembered, some had been working here and there and in factories. All these circumstances made diligence paramount and quarantine was the surest way to keep them under surveillance. The City Health Officer had his hands full; the quarantine building was to be done under his direction, one-half mile from city line by way only of one roadway; purchasing and selecting outfits, answering here and there, looking to the disinfection of mail matter, which was strictly complied with by our postmaster, Hon. Philip Zoercher; attending Council meetings; and the community anxiously awaiting the arrival of vaccine virus.

It can easily be seen that the very ones who most threatened the spread of small-pox were outside of the city and needed the proper attention. Dr. C. M. Ladd refused to come, and the people of the city of Cannelton would not suffer him to return to his home. If he attempted to do his duty it left no other alternative than to appoint an assistant. This he did in the person of Dr. Wm. Cluthe; but he had not given him his commission in writing. He promised to call the County Commissioners together, as members of the County Board of Health, but didn't attend to that. Up to Sunday afternoon nothing was heard of him by Dr. William Cluthe, when he went up to the guard line and met him and received the following agreement, dated April 19, 1895, as on that day really said agreement was made :

“CANNELTON, IND., April 19, 1895.

“It is hereby agreed that Dr. Wm. H. Cluthe, of Tell City, act in conjunction with Dr. C. M. Brucker, local health officer of Tell City, in my behalf as health officer.

“C. W. LADD,
“*Secretary County Board of Health.*”

This done, Dr. C. M. Brucker, local Health Officer, was at once shown the above writing, and Dr. Wm. Cluthe began to act accordingly.

In the evening of April 20, 1895, Dr. Wm. Cluthe, in company with Wm. Theodore Kiefer, Councilman of the Third Ward, consulted Dr. C. M. Brucker, and the conclusion was the adoption of a domicile quarantine against all and any person exposed within the last week, either direct or indirect, and ordering twenty tubes of vaccine lymph, as made by the Pasteur Institute, N. Y., at the expense of the county. At this point Dr. C. M. Brucker stated that he had already written a letter ordering twenty-five tubes, and if a telegram would go to them it would reach them about the same time his letter would get to them, and suggested to send it in his name, and all would come together. This seemed plausible and was accepted; the message went off in Dr. C. M. Brucker's name, City Health Officer. This matter is explained with some detail, because, as will be seen later, this transaction was the basis of some change

in the person of Health Officer. Dr. C. N. Metcalf, Secretary of State Board of Health, upon receiving official information, must have acted promptly and procured some vaccine points and sent them without delay, and those points sent were readily used up.

April 22, 1895, another Council meeting was held, and for brevity's sake I let the record explain as follows:

"Another meeting was called upon April 22, 1895, when the marshal was directed to clear the city from all suspicious characters who can not give a satisfactory account of themselves and of their business here. An ordinance establishing a city hospital, compelling the removal of persons having small-pox and providing for the supervision thereof was duly passed at this session.

"J. H. STUEHRK, *Clerk.*"

The ordinance was substantially the same as the Muncie emergency ordinance as published in Public Health, 1895, pages 116 and 117.

April 23, 1895, the Hospital was completed, the officers of the same appointed and preparations made to transfer the patients. Dr. W. H. Muelchi, Superintendent, took charge of the same as physician, and his report will show how work was conducted there—the same being annexed to this history.

Dr. Wm. Cluthe, as Assistant County Health Officer, on the same day issued posters, and placed them in conspicuous places, as follows:

"In order to prevent any possible spread of small-pox to the citizens of Troy Township surrounding Tell City, I hereby give notice that I will shortly call at every residence in order to vaccinate; and further give notice that it is the lawful duty of every citizen to report at once any suspicious characters and suspicious patients to the undersigned. Every citizen is asked to use due diligence in having premises cleaned and use proper disinfectants, information concerning which will be cheerfully given by undersigned.

"WM. CLUTHE, M. D.,

"Acting Secretary of County Board of Health.

"TELL CITY, IND., April 23, 1895.

"I approve the above measure.

"C. M. BRUCKER, M. D.,

"City Health Officer."

Consultations were had with the Troy Township Trustee, Wm. Gibson Hubbs, who had also received instructions from the County Health Officer directing him to act with Dr. Wm. Cluthe as his assistant. He had already placed guards at different places, who were also used as messengers for anything needed in the quarantined families, to wit: Henry Alberding to change off with John Kleeman, on Tell and Fourteenth streets; Bill Johnson on Eleventh, on day guard, and Peter Weis on Eighth and Schiller, in the same capacity. Inspection of all the parties quarantined was had. Mr. E. G. Hoag and Ben. Aberly were sworn in as sanitary policemen and directly attached to the Health Office, with instructions to watch any development and new cases, to report either to the City or Assistant County Health Officer.

In the meantime the physicians awaited anxiously the arrival of vaccine virus. The City Health Officer had ordered but four hundred ivory points from the National Vaccine Company, Washington, D. C.; some came April 24, the balance, April 25. In the morning of April 25, 1895, a formal meeting was held by the Board of Health, and Dr. C. M. Brucker reported that work had increased in such a way that it was impossible for him alone to do it, and asked for an assistant. This was allowed to him and his salary fixed at \$20 per day, the assistant's fee included and to be paid by him, but refused to make known the name of his assistant. Dr. C. H. Mason informed upon inquiry Dr. Wm. Cluthe, that all virus ordered had arrived. Thereupon, Dr. Wm. Cluthe demanded and asked for the tubes of virus for the use of those outside of the city, and especially those quarantined. The City Health Officer refused and proposed to vaccinate all within the city first, and then he would join him to vaccinate outsiders, to which proposition the County Health Officer took exception, and demanded peremptorily the delivery of the fifteen tubes of twenty vaccinations each, and ordered by him, although in Dr. C. M. Brucker's name. Again a refusal was made. Then followed a consultation with Township Trustee Gibson Hubbs, who offered as an explanation for Dr. C. M. Brucker's act, in that Dr. C. M. Brucker, as City Health Officer, had jurisdiction two miles outside of the city limits, for he had told him that himself, and expected to get twenty-five cents for each vaccination. This proposition was a very grave one, under the circumstances. It

implied a great expense in maintaining those quarantined, and a possible greater expense in case small-pox would break out amongst them; a proposition also contrary to the dignity of professional courtesy and understanding, and an absolute action of malfeasance to put a still greater burden on our city treasury. Seeing all this and weighing the same in the proper light, it can easily be imagined that it was aggravating the temper of Dr. Wm. Cluthe. Not considering that he was to be cast aside; not considering his own gains, but a citizen of Tell City, Dr. Wm. Cluthe, complained to the members of the Common Council, and told them of the action of their Health Officer and the consequence of such action. In the meantime, the result of the morning meeting was spread and an indignant appeal was made so that for the evening another meeting of the City Council was held. Again refuge is taken to the record for both morning and evening sessions, as follows:

“Called Session City Council, April 25, 1895, 8 A. M.

“The purpose of this meeting was to make arrangements to have suspected cases of small-pox attended to by some physician, as the Secretary of the Board of Health claimed that it was impossible for him to fully attend to the duties incumbent on him at the present time, and requested that his salary be raised in order to enable him to employ an assistant. On being asked what amount it would require, the Secretary stated that he would meet all the expenses of the Health Office, employ an assistant, and attend all suspected cases of small-pox properly, for a salary of \$20 per day.

“Upon motion, it was then resolved to allow the Secretary of the Board of Health the above sum of \$20 per day while the epidemic lasted.

“Council then adjourned.

“H. J. STUEHRK, *Clerk.*”

“Called session April 25, 1895, 7:30 P. M.

“The meeting was called to order by J. B. Wichsar, Mayor, *pro tem.*

“All Councilmen were present.

“Mr. Theo. Kiefer moved to reconsider the resolution granting the Secretary Board of Health \$20 per day, which motion prevailed. The resolution allowing the Secretary Board of Health \$20 per day being then put was lost by unanimous vote.

"Dr. C. M. Brucker, Secretary Board of Health thereupon tendered his resignation, which was, upon motion, accepted. Mr. Theo. Kiefer then offered a resolution to appoint Dr. Wm. Cluthe as Secretary Board of Health, fixing his salary at five hundred dollars (\$500) per year; this resolution was adopted by the following vote: Yeas 3; nays 2. A telegram was ordered to be sent to the Secretary Indiana State Board of Health requesting his presence here to make official investigation of the small-pox cases at the hospital and city.

"Council then adjourned.

H. J. STUEHRK, *Clerk.*"

Dr. Wm. Cluthe accepted at 8 p. m. and entered upon his duties at once retained all officers (sanitary) existing, and extended powers to arrest, warn and watch to guards appointed by the Township Trustee, with the understanding that no extra pay was to be made to them; they only had the right now to enter into the city, which they had not before, as the marshal would not swear them in as such. Next morning he visited the divers infected places, found the residence of Wm. Bolin flagged with a small-pox flag. After close and scrutinizing examination of Mrs. Wm. Bolin, failing to recognize small-pox, he removed the flag himself. The children of Abe Montgomery presented features to be watched, also the Prop. Bolin and S. W. Fulkerson families. Jim Amos' family was O. K. yet, and also the little one born to the eldest daughter, they remained well and no case of small-pox developed by them. There was scarcely any one to be had to start disinfection, which had not been attended to before in any of the infected houses, so Dr. Wm. Cluthe, being determined, wrapped up his sleeves and, supplied with corrosive sublimate, copperas, carbolic acid, permanganate rages, scrubbing and whitewash brushes, started at each house after sulphur fumigation of the respective premises was completed. Removal of all trash stuff surrounding and within same was ordered, under his supervision, to be taken out to a safe place, either in the yard or street, saturated with coal oil and ignited, to be consumed by quick combustion, with the precaution of adjacent residents closing their premises to avoid any probable infection from this source. While supervision was given the guards for direction, the well members of the respective families done the work. Privies were covered with copperas, and ground from

the site a new one was to be made so as to prevent infection from overflow during a rising spell. While the doctor himself attended to the vaccination of exposed parties and their immediate cohabitants. Dr. C. N. Mason kept up vaccination so Dr. F. A. Evans within the city while Dr. C. M. Brucker was given the privilege to vaccinate all outside upon application, but he only vaccinated whites and passed by those under domicile quarantine. These Dr. W. Cluthe had to attend himself to his surprise. The subject of vaccination by this time was taken in well. No opposition except three or four families. Things got along better and acquired a more hopeful aspect. People began to argue and as a consequence the fact leaked out that Abe Montgomery had had syphilis, and a similar eruption about a year ago. This belief took root and established a doubt as to the identity of small-pox. Mr. J. B. Wichsar, President *pro tem.*, in absence of the Mayor, Hon. A. P. Tenn, telegraphed to Dr. C. N. Metcalf, Secretary of State Board of Health to come here and investigate this. Dr. C. N. Metcalf responded, coming here April 29th, but without knowing the change in the persons of the local Health Officer, calling on Dr. C. M. Brucker, who drove Dr. C. N. Metcalf out to the hospital where they met Dr. Wm. Cluthe at the bulletin board consulting with Dr. Wm. H. Mulchi. After a hearty greeting of welcome, Dr. C. N. Metcalf proceeded in company of W. H. Mulchi to the hospital, while Dr. C. M. Brucker, Wm. Cluthe and his son Edward C. Cluthe remained by the bulletin board. That same afternoon the City Council met by invitation of Dr. Wm. Cluthe, Health Officer, to hear the report of Dr. C. N. Metcalf. The record of this meeting is as follows:

“On April 29th the Council met to hear the report of Dr. C. N. Metcalf, Secretary State Board of Health. Dr. C. N. Metcalf stated that he had visited the Hospital and found typical small-pox. He approved of the work done and advised the Council and Board of Health to proceed with the now inaugurated measures to stamp out the disease.

“Council thanked Dr. C. N. Metcalf and adjourned.

“H. J. STUEHRK, *Clerk.*”

After visiting the divers places of infection, Dr. Wm. Cluthe asked Dr. C. N. Metcalf to see another suspicious case—that of Mrs. Lizzie Ross, colored. In his presence, her children and the family of David Jackson, residing in the same house, were vaccinated.

April 29, at night, Abe Montgomery died. Dr. W. H. Muelchi was instructed by the new Health Officer to bury the body according to the instructions of the State Board of Health. In addition, special instructions were given him regarding a ———, destined to meet a much needed demand, and originated by Dr. Wm. Cluthe, and agreed for trial by the Secretary of the State Board of Health (Dr. C. N. Metcalf), in the morning.

The idea to protect the grave digger in case a number should die with small pox is very apparent. Statistical reports show many infections from digging graves adjoining small-pox graves. Dr. Wm. Cluthe's experience and information were of such a nature as to create experimental type of burial for prevention of infection to those who might have to dig another grave near the first. His method, as explained to Dr. C. Metcalf, was incineration process, and the method is as follows follows, as applied to Abe Montgomery: The usual method of saturating sacks and stuffs, and wrapping the body well was ordered; then the undertaker ordered to take dry sawdust and a quantity, say five pounds, of flour of sulphur out with a coffin somewhat larger than necessary. Enough sawdust to make a fill and packing was mixed with the sulphur as well as possible, the body placed on about two feet and two inches of this, and the sides were packed up, but not too tight, and also covered with about two inches. This was ignited and allowed to burn pretty well, so that enough heat was developed to ignite the particles of sulphur within the sawdust, when the cover was placed on the coffin. Expecting the fumes, in the first place, to penetrate and kill any poison of small-pox within this layer; and, secondly, to penetrate the adjacent ground for the same purpose; thirdly, it was expected that the sawdust and melting sulphur would form a kind of crust to prevent permeation of the poison. The instructions were carried out, and, theoretically speaking, successful so far as the action of melting sulphur and sawdust were concerned; but as to the formation of a crust no steps were taken for examining, as the labor

was too much for the few who could be asked to do that. Suffice it to say that under these circumstances we got the sexton very readily to dig the next grave a few feet apart of the first, although he never had the small-pox, and did not show the slightest symptom at any time. Theoretically it is all right; practically, easily done, and could be tried again under similar circumstances, and experiments and method improved.

In the subsequent days excitement abated to some extent, especially after the infected houses were closed, and all tenants removed out of the Sweitzer Hall—the family of Abe Montgomery and Mrs. Lizzie Ross—on May 2, 1895, leaving the Amos and Dave Jackson family, with two daughters of Mrs. Lizzie Ross, under strict quarantine in their residence, and, as Dr. W. H. Muelchi describes sufficiently in his report, the reader is kindly referred to same.

Vaccination progressed steadily and all along the line. Certificates were used, signed by physicians who vaccinated, certificate countersigned and approved if vaccination found successful by the local health officer. Physicians did not all return their stubs, but an estimate of at least 1,200 vaccinations were made. The vaccine lymph made by the Pasteur Institute proved very successful, and, in the opinion of Dr. Wm Cluthe, absolutely prompt. He used a grooved lancet and placed enough lymph in the groove for one vaccination, taking care to clean the lancet after each use—scarifying the cuticle only—and at three or five parallel places on body of left deltoid. The ivory points furnished by the National Vaccine Co., of Washington, D. C., were also prompt, especially where the abrasion and scarifying method was employed.

May 15 to 18, 1895, everything ready to raise quarantine, the Ross and Dan Jackson residence, the Becker building with the Amos family, were ordered ready for leaving the same. After rigid investigation of all and any symptoms, after disinfection of their plunder, which they could take along, after bathing and disinfecting their persons one by one, marched out in a new dress or suit furnished by the city through their Health Officer, into their new quarters, with a certificate of being free from contagion, and at liberty to pass among their friends and the community. Everything that required more than its value for disinfection, was placed in the respective yards and burned up by quick combustion, under the direction of the Health

Officer. Part of the plunder belonging to Prosp. Bolin and S. W. Fulkerson was utilized at the Hospital and hauled out by the ambulance wagon and crew, and here it may be stated that Mike Winkler furnished the city one horse at 50 cents per day and food. The balance of their plunder was carried back to the Schweitzer Hall in a safe place and destroyed by quick combustion at 9 P. M., May 18, 1895.

Schools had been closed in the start, April 19, 1895, being the last day open, and remained closed until May 13, 1895, upon the certificate from the Health Officer to the Trustee of common schools here.

The question of keeping churches open was seriously considered. Dr. Wm. Cluthe saw to the proper disinfection of these places himself, at night, as long as no more cases developed in any other family except those quarantined. This had quite a quieting influence over the community.

First Monday in May Circuit Court of Perry County was to open, but Hon. Judge E. Gough upon proper judgment ordered no court to be held at that time, and ordered all cases on docket to be continued until the next regular term.

With the appointment of Dr. William Cluthe ended extra meetings of the City Council. In its place meetings of the Board of Health were instituted. Of course, opinions were always exchanged by Health Officer with the representatives of the city, and *vice versa*. Mutual confidence was there. Only important matters called them together, as on May 10, 1895. The record reads thus :

“Called meeting of the Tell City Board of Health at Mayor A. P. Tenn’s office, Chairmakers’ Union Building, at 1 p. m. All members present, and City Attorney J. T. Patrick. Situation of Troy quarantine discussed by reason of a demand made by Troy Board of Health, asking for a sworn statement as to the true situation. This request was concurred in and City Attorney instructed to write same and have it signed and sworn to by all members of the Tell City Board of Health. Secretary Board of Health stated the amount Ben Coleman and Robert Jackson asked for plunder belonging to them, and which had been exposed, was \$75 each. This was deemed too much, and H. D. Stuehrk selected as a committee to appraise same. This plunder was then declared a nuisance, and the

Secretary ordered to destroy same; also the personal property of Prosp. Bolin and S. W. Fulkerson.

"Meeting then adjourned.

"WM. CLUTHE, *Secretary*."

Within a few days the quarantine was declared off by Troy, Louisville and Hancock County, Kentucky. The city officials of Cannelton hesitated, but had to change front also. How it happened, it is expected that some so-called physicians and persons disregarded truth and respect for themselves and were led by jealousy and hates, and here it may be said that upon information received from Dr. C. W. Ladd, County Health Officer, Dr. C. N. Metcalf, as Secretary of Indiana State Board of Health, came down again. This time it was by his free will, not by the solicitations of Tell City officials, and it is hoped by the writer that Dr. C. N. Metcalf will append all and every information received by him from County and City Health Officers directly connected with this brief writing to give the writer, the people of Tell City and Cannelton an inside view of the manner Tell City was treated. But C. N. Metcalf did not come alone. He asked Dr. D. C. Ramsey, of Mt. Vernon, as member of the Indiana State Board of Health, to meet him at Lincoln City and there join him on his way to Tell City. Dr. C. N. Metcalf also telegraphed Mr. E. C. Clark, Mayor of Cannelton, and Dr. C. Ladd, County Health Officer, to meet him at the Moreveck House at Tell City, May 15, 1895. Mayor Fenn was invited at the interview. Then Dr. C. N. Metcalf and Dr. D. C. Ramsey visited the hospital and gathered all necessary information of the status of small-pox here in its relation to raise the quarantine. Then later Dr. Wm. Cluthe was sent for and his statement taken, and it was that both members of the State Board of Health present were satisfied that the Cannelton quarantine should be raised and a normal status of commercial interest be established. The reader may ask why all this? Answer: The hope that Dr. C. N. Metcalf and the State Board of Health will give all the correspondence of your County Health Officer, and the same will easily be made out. The only thing we will say is, that prior to the above cited meeting the Mayor of Cannelton or the Health Officer of Cannelton or the County Health Officer never asked Dr. William Cluthe as Health Officer of Tell City for any information of the small-pox at that time, but, as it appears, listened to all kinds

of gossips and very likely reports from a malcontent and traitor within our own midst. Why? Doubtful expressions as to the true nature of the disease sprung up every once in a while, as is the case anywhere, even so much so that our Mayor, the Hon. A. P. Fenn, after his return, sent to Dr. A. J. Thomas, of Evansville, either to come up himself or send some one acquainted with the characters of small-pox. Dr. LeHardy responded to this summons and diagnosed it small-pox, but that absolute falsehoods were stated to the State Board of Health was a conjecture not even dreamed of by our City Board of Health.

To get a rebuke can happen, and it did happen to one health officer from the Health Office of Troy, Indiana, but we considered the source where it came from. The slurry language used showed the intentions of its user, and was for personal effect. The basis for all complaint was a notice in the Tell City News, published April 27, 1895, and aimed to be at that time a true statement, but was headed in large type: "No Small-pox in Tell City." The statement, though, was intended for our home folks, and to act a part of a pacifier for our home people, it stated that there were three cases of small-pox in the hospital and none in the city proper then, and read as follows:

CITY HEALTH OFFICE.

There are three (3) cases of small-pox in the hospital outside of the city, all prospering, no symptoms of the disease appearing on any of the persons individually quarantined. In fact, flags at one suspected residence will be removed and quarantine lifted, as soon as the house is properly disinfected.

WM. CLUTHE,

Health Officer.

Tell City, Ind., April 27, 1895.

Our Mayor, Hon. A. P. Fenn, upon his return from a business trip, was level-headed enough to recognize a certain lack of confidence as to the identity of small-pox, and as his action in securing the services of Dr. J. C. LeHardy was not devoid of criticism on the part of the City Health Officer—but when his explanation came to him in proper form and his presentation of the same show the spirit of a man full of sympathy for the subjects under his control as Mayor of the city, also a man for seeing the complex circumstances the City Health Officer was placed under—a man who, by virtue of his office, was President of the local Board of Health, and as such responsible

for permitting the spread of small-pox. This man and his actions appeared in a different light and reflected well on his character and good will. The following is Mayor A. P. Fenn's explanation made to this Health Office to Dr. Wm. Cluthe, Health Officer:

"In justice to our physicians I desire to make the following statement in regard to the employment of Dr. J. C. LeHardy of Evansville, Indiana, to examine the small-pox cases in our city. I was on a business trip in the State of Texas when small-pox was discovered in our city, and was not aware of the plague until I was on my homeward journey. I arrived home Monday, April 29, 1895, ten days after it was discovered, and found that our citizens, almost to a man, did not believe that it was small-pox. Inquiring into the reason, I found that the fact of small-pox being discovered at two different houses, located over one mile apart, at one time, and the dread disease not being taken by any person except by occupants of those two houses, was almost the sole reason. I saw at once that it would be necessary to give our citizens proof aside from our worthy physicians' statements, and called on a friend at Evansville, Indiana, to select and send up in profound secrecy a competent judge in the matter. Had this not been done, many of our citizens would have exposed themselves to the localities where small-pox existed, and there is no telling where small-pox would have ended. Aside from this, it was due our doctors that the apparent ——— be cleared, and we now have evidence which will show forever that we had small pox, that it was wiped out effectively without spreading beyond thresholds where discovered the first day, and that our local physicians are up to date and have our citizens' highest praise and heartfelt thanks for their achievement.

"Respectfully yours,

"A. P. FENN."

The hospital was placed under old man Fulkerson's charge after Dr. W. H. Muelchi and others left. Two weeks longer, every day, fumigation was made. At first rooms and doors were painted, and later every ward inside and out whitewashed, using freely the carbolic acid in the mixture; stoves blackened and everything placed in a condition for use again in case o

need, and the hope is expressed that this may never come. The actual cost is expressed in the following:

Hospital building	\$284 39
Furniture and bedding	153 15
Hospital supplies	266 80
Hospital physician	652 28
Hospital nurses and attendants	263 40
Hospital ambulance	68 20
Disinfectants	39 55
Sanitary police and guard	293 98
Health office and virus	350 00
Physicians	130 00
Drayage and buggy hire	70 41
Telegrams	6 14
Printing	11 50
Supplies furnished parties quarantined	126 00
Total	<hr/> \$2,675 77

Cash loss to the school fund by extra expense and closing schools, teachers having been hired by the month, would bring this sum up to fully \$3,000 actual loss, as the following will show:

“TELL CITY, IND., January 11, 1895.

“*Dr. Wm. Cluthe, Health Officer City of Tell City:*

“DEAR SIR—In answer to your request as to the cost incurred to our free schools during small-pox time, the same is about \$300.

“CHAS. F. KAELIN, *Treasurer.*

[SEAL OF SCHOOLS]

“WM. H. MUELCHI, *Secretary.*”

The writer is an absolute and ever working advocate of “vaccination.” His experience taught him this and strengthened the lessons of his teachers and parents. He can recall instances where vaccinations was pre-eminently the factor of preventing or at least mitigating the disease, while others died. This siege of small-pox proved again very conclusively the protection and even the preventive influence of vaccine virus. Mrs. Lizzie Ross was not vaccinated, neither her children, nor David Jackson and his family. They had been with the woman up to the time she was taken to the hospital, May 2, 1895. April 29, 1895, in the presence of Dr. C. N. Metcalf and C. M. Brucker, they were vaccinated with lymph. It was a success

in each instance, and neither took small-pox. Prosp. Bolin and S. W. Fulkerson's families were vaccinated, and by those, in whom vaccination was successful, absence of small pox was the result, and in the balance in whom small-pox did show up it did so in a degree equivalent to the development of vaccination. Sarah Fulkerson, a valuable instance, vaccine pustule formed, acted slow, and Dr. C. N. Metcalf asked the Health Officer to revaccinate; next day it dried up, second vaccination unsuccessful, and she had a bad case of small-pox. But Dr. W. H. Muelchi has been dwelling enough on that point, and will pass over the vaccination question.

The writer is of the same opinion as Dr. F. G. Jackson, of Muncie, Ind., concerning the contagious influence of small-pox with the second day of the eruption stage. This is a very important matter in the beginning, as every epidemic or outbreak of small-pox is not readily recognized until the eruption stage sets in and the public not ready to believe the existence of small-pox until it is too far gone—the mistake being in favor of chicken-pox at Cannelton, measles in other places, or syphilitic eruption, as in the first case here. People will believe anything else than small-pox in the start at a time when the common adage could be wisely administered—"one ounce of preventative is better than a pound of cure," but such is a notable fact in the writer's experience. This opinion should not exclude further investigation concerning this point, and no means should be spared to inspire the opinion of the fourth fact, as published in *Public Health*, page 893, p. 182, as only a probable fact, because it may lead to negligence and carelessness until it becomes to be a recognized fact. At no time trust the non-contagiousness, or until you have by proper time experienced absence of contagion, for it may return like a sneak thief at a time when least expected; always fight the enemy in measure equivalent to its powers of contagion. Next to vaccination, disinfection is a capital means. Sulphur is a fumigator, and developing evolution of sulphurous acid gas, it passes through crevices, cracks, fissures and openings in walls and furniture and clothing, etc., and acts as a disinfectant agent on the supposed small-pox pores. The free use of corrosive sublimate, with or without permanganate of potassium, on all walls and furniture, especially stoves, pump handles, chairs, steam or boiling water for clothes and bedding, etc. The liberal use of copperas, crude carbolic

acid on floors and under floors in cellars, and privies, and closets, and chambers, all of which are necessary means to overcome the inroads of small-pox and inspiring confidence of the public. The hoe and rake, the scraper and shovel, in and around the premises, cleaning all filth and loose and hanging material of a filthy or probable carrying character and connects with little or no value, rubbish, bones, wood, etc., and pile it up in convenient and safe places, and then saturate it with sufficient coal oil and have it consumed by the best of all disinfectants—"quick combustion or fire." Those were the methods employed here, and the community has not been the loser by a great deal, even if it costs something to do this and compensate somewhat those who have to lose it. The saving of one life alone, the prevention of one single case, may only be the reward of restoration of commerce of only one week ahead of time, by reason of such action will pay ten-fold for all such expenses.

And now to domiciliary quarantine, again reference is made to Dr. F. G. Jackson, and his opinion upheld, and for that reason this is placed to the last rank of preventive measures, but, nevertheless, it is a fair exponent, theoretically and practically, if carried out properly and in conjunction with the others named, *i. e.*, vaccination and disinfection, dependence on it alone is unwise and cruel; it places people exposed to the mercies of the poison, and, if infected, exposes the other members. Everything should be done for them. The watchful eye, the human should be with them first and all times. Vaccination should be prompt and at once done, or at least as soon as possible, and, first of any, by those exposed and in immediate danger of small-pox. Second, those exposed and under domiciliary quarantine, then comes the balance. Fumigation and disinfection should be scrupulously attended to, to persons and clothing exposed first, and then to members of respective households. Then, and only then, domiciliary quarantine means something and is one of the heroic means of conquering as heroic foe.

Next, the method of burial to prevent contagion by the grave digger and his implements. The incineration process, as delineated by writer, has been described, and while he hopes that Tell City, of Perry County, or any place, will not see renewal and experience the prevalence of small-pox, it may spring up here and there and may cause others to observe preventive

measures for humanity sake, as it is mighty difficult to get work done under threatening circumstances.

The summary of the experience made regarding small pox here is as follows :

The teachings of Jenner regarding vaccination should be upheld and ingrafted into the minds of the people, and revaccination encouraged, and every local and county health officer should make an effort to get vaccine virus in the form of lymph and free from inert matter, and offer to vaccinate all and if it has to be free of charge, the lymph being furnished by the respective counties. Fumigation and disinfection should be strictly adhered to and executed regardless of cost or loss of property, based upon proper judgment in the selection of disinfectants, as destructive influences of material is concerned. Domiciliary quarantine should be encouraged with all and every exposed person, but connected only with the strictest adherence to vaccination or revaccination and disinfection and removal of every person showing sure symptoms of small pox to the hospital, thereby making isolation of afflicted ones a paramount duty to relatives as well as the physicians' confidence in the profession another weak point, at such a time should be encouraged by physicians showing confidence to themselves, and not waver in expressions regarding the diagnosis.

Selfishness, desire for gain, jealousy among physicians should be cast aside, and harmonious action take its place, for ye physicians, the eyes of the whole community are resting upon you, ready to help, anxious to assist, for the fear has taken strong hold on them that one of their own loved ones may have to succumb to the ravages of small-pox, and in closing, the last sentence of Dr. F. G. Jackson is quoted verbatim, as it expresses a great lesson, a strong lesson and a suggestive lesson. A united and warmest support should be given to officials, which would result in the prompt and successful suppression of one of the most loathsome diseases known to physicians, and only add its importance by emphasizing it. No flinching by the Health Officer, support to the local authorities, representatives of the locality, assistance by the public at large, will develop a sentiment of confidence, which, all if supported by the press as a moulder of public opinion, will form a phalanx to

drive out the intruders and destroy his influence, not only surrounding the community, its neighborhood, nay, stamp him out never to return again, for small-pox is a preventative disease.

REPORT OF W. H. MUELCHI, M. D.

On Monday afternoon, April 15, 1895, I was called to see Abe Montgomery, a colored man aged twenty-six years, and living near the northeast limits of the city in an old two-story frame building known as the old Philip Becker property, on Twelfth street near Schiller.

He stated to me that he had been seized by a moderate chill and some vomiting the day before, and was still suffering with intense headache and backache. Also stated that he had not been feeling well for some days.

Examination showed his temperature to be 103° F., pulse 54, respiration 26. On Tuesday afternoon, April 16, temperature was 104°, pulse 52, irregular, but full and strong, respiration 22, with headache and backache continuing.

On Wednesday, April 17, my attention was called to a rash which had been noticed to appear early that morning. Temperature 104.20°, pulse 52. The rash had first been noticed on the forehead, and was now plain on the entire face and beginning to appear on the arms.

The case was supposed by the friends to be one of measles, but the doctor remained silent as to his diagnosis, simply stating that there was a doubt in his mind as to its being measles, that the case looked quite suspicious, and requested that all persons not members of the family remain away hereafter; also, that no visitors be allowed to call, as the disease might prove to be contagious, but that it would require a day or two more to determine the exact character thereof.

On Thursday, April 18, I found the eruption all over the body, distinctly papular, feeling hard like grains of sand or small shot under the skin. Temperature 105°, pulse 58. One peculiarity about this case was that the pulse remained very slow.

I now grew suspicious of having a case of small-pox on hand, but as I could not determine by close questioning that the patient had been away from the city, or had otherwise

knowingly exposed himself, I concluded to wait another day before stating my diagnosis. Another reason for hesitating was the information by the friends that the patient had had a similar eruption in the spring previous, and that the attending physician had pronounced it syphilis.

Early on Friday morning, April 19, before I had made my regular visit, Dr. Evans, who was passing by, was called in to see the patient, who had been quite restless during the night. Dr. Evans first supposed it to be a case of rhus-poisoning, but upon closer examination, and after taking a few whiffs of the peculiar odor emanating from the patient's body and breath, he stated it as his opinion that the patient must have small-pox, prescribed and left.

Upon arriving an hour or two later I found the patient resting pretty well, temperature 101°, pulse 66. A number of vesicles were now visible on the forehead, lips and sides of the nose. There being no further doubt in my mind as to the diagnosis of the disease, I at once called upon Dr. C. M. Brucker, City Health Officer, and together we visited the patient and pronounced it small-pox. However, before informing the city authorities it was deemed best to hear the opinions of the other physicians in the city. Therefore, Drs. Wm. Cluthe and C. H. Mason were asked to see the patient, which they did, and at once pronounced it a case of small-pox.

Upon our way to inform the City Council, it was reported to us that there were two suspicious cases in "Schweitzer Hall," a two-story brick building in the southern part of the city. Drs. Brucker, Cluthe and myself at once visited this place and pronounced both cases small-pox. One of these was Mrs. Melinda E. Bolin, aged 30; the other Levi Fulkerson, aged 15. The Bolin family numbered seven, the Fulkerson family eight, and the Montgomery family five, making a total of twenty persons who had been in immediate contact with the disease. Besides these, a large number of others had been exposed, the upper story of Schweitzer Hall being occupied by Ben Scott Coleman and Bob Jackson and their families, all colored. These fled as soon as the cases below were pronounced small-pox. A part of the Becker building was also occupied by the J. Amos family, numbering twelve persons. In all, about fifty persons had been exposed outside of the families in which small-pox prevailed.

By agreement of Dr. C. M. Brucker, Health Officer, and the City Council, the three cases present were placed in my care, and I was to attend to any new or suspected cases that may appear; the city to bear all the expense for attendance, medicines, food, etc., until other arrangements could be made.

On Sunday morning, April 21, a new case was reported to have occurred in the family of Wm. Bolin, living in the old Pat. Cassidy building, immediately opposite to the Becker building, in which lay Abe Montgomery. I at once visited the place and found the patient to be Mrs. Lydia Bolin; at once vaccinated the other members of the family and treated the case as a suspect for a few days, when the case proved to be one of measles, and not small-pox.

SMALL-POX HOSPITAL.

The Council and physicians of the city having held several meetings, it was decided to erect a hospital, in which the patients could be isolated and better cared for. Henry Arndt received the contract for erecting the same, and W. H. Muelchi, M. D., was elected to act as Superintendent of Hospital and Medical Attendant to patients.

HOSPITAL CREW.

W. H. Muelchi, M. D., Superintendent.

Henry Moser, Nurse.

John Moser, } Guards.
Robert Ray, }

Mrs. Annie Montgomery, Cook.

PATIENTS AT THE HOSPITAL.

On Tuesday, April 23, about 1 o'clock P. M., myself and the two guards, John Moser and Rob Ray, mounted the covered wagon which had been procured to convey the patients from the city to the hospital and started after the patients. The driver, John Moser, was instructed to blow a whistle at short intervals so that people along the route might be warned and repair to their homes, closing windows and doors.

Everything worked nicely; patients were placed upon a mattress in the wagon without any resistance whatever by themselves or friends, and conveyed to the hospital without any trouble.

In order to suppress any demonstration whatever, at once, a sufficient number of guards had been stationed in the neighborhood of the infected houses, but everything remained quiet, so that myself and the guards could perform our duties without molestation.

Patients were brought to the newly erected Hospital as follows:

First. Abe Montgomery, black, male, aged 26 years; first taken ill on Sunday, April 14, 1895. Admitted to Hospital April 23; died April 29, at 4:30 A. M.; buried at 12:30 P. M. of same day, on the premises.

Complication—Syphilis.

Second. Levy T. Fulkerson, white, male, aged 15 years; first taken ill on Friday, April 12, 1895. Admitted to Hospital April 23. Thoroughly disinfected and dismissed May 28. Rejected at Poor House and returned to Hospital on same day.

Third. Mrs. Melinda E. Bolin, white, aged 30 years; first taken ill on Monday, April 15, 1895. Admitted to Hospital April 23. Thoroughly disinfected and dismissed June, 1895.

In this case the eruption broke out anew at the end of the fifth week and was complicated with large boils in axilla.

Fourth. Mrs. Annie Montgomery, black, aged 25 years; first taken ill on Tuesday, April 30, 1895. Admitted to Hospital May 1. Thoroughly disinfected and dismissed June, 1895.

Fifth. Mrs. Lizzie Ross, black, female, aged 39 years; first taken ill on Saturday, April 27, 1895. Admitted to Hospital May 2; died on Saturday, May 4, 1:15 A. M.; buried at 12:30 P. M. of same day, on the premises. Complication—Pneumonia. This was a case of the hemorrhagic form of small-pox.

Sixth. Flora Montgomery, black, female, aged 6 years; first taken ill on Sunday, April 28, 1895. Admitted to Hospital May 2. Thoroughly disinfected and dismissed June, 1895.

Seventh. Walter Montgomery, black, male, aged 4 years; first taken ill on Sunday, April 28, 1895. Admitted to Hospital May 2. Disinfected and dismissed May 27. Mild case.

Eighth. Mary Montgomery, black, female, aged 16 months; first taken ill on Saturday, April 27, 1895. Admitted to Hospital May 2. Disinfected and dismissed May 27. Complication—gumboils.

Ninth. S. W. Fulkerson, white, male, aged 60 years; first taken ill on Monday, April 29, 1895. Admitted to Hospital May 4. Pronounced well on May 25 and remained at Hospital as guard.

Tenth. Sarah Fulkerson, white, female, aged 8 years; first taken ill on Thursday, May 2, 1895. Admitted to Hospital May 4. Confluent form; very bad case. Disinfected and dismissed June.

Eleventh. Ephraim Fulkerson, white, male, aged 10 years; first taken ill on Saturday, April 27, 1895. Admitted to Hospital May 4. Well marked case; recently vaccinated. Disinfected and dismissed May 28. Rejected at Poor House and returned to Hospital on same day.

Twelfth. Robert Fulkerson, white, male, aged 12 years; first taken ill on Thursday, May 2, 1895. Mild case, comp. boils; vaccinated. Admitted to Hospital May 4. Disinfected and dismissed May 28. Rejected at Poor House and returned to Hospital on same day.

Thirteenth. Rachel Ann Bolin, white, female, aged 4 years; first taken ill on Wednesday, May 1, 1895. Admitted to Hospital May 4. Very mild case; vaccinated. Disinfected and dismissed June.

Fourteenth. Pros. Bolin, white, male, aged 41 years; first taken ill on Tuesday, April 30, 1895. Admitted to Hospital May 4. Mild case; vaccinated. Thoroughly disinfected and dismissed May 28. Rejected at Poor House and returned to Hospital on same day. Finally dismissed May 31.

Fifteenth. Mary Ann Bolin, white, female, aged five years; first taken ill on Thursday, May 2, 1895. Admitted to Hospital May 4. Mild case, comp. boils; vaccinated. Disinfected and dismissed June.

Sixteenth. Frank Fulkerson, white, male, aged 7 years; first taken ill on Thursday, May 2, 1895. Admitted to Hospital May 4. Very mild case; vaccinated. Disinfected and dismissed May 28. Rejected at Poor House and returned to Hospital on same day.

Seventeenth. Mrs. Mary Fulkerson, white, female, aged 39 years; first taken ill on Thursday, May 2, 1895. Admitted to Hospital May 4. Abortive form, comp. gumboils. Declared well May 29, but allowed to remain at Hospital with her husband.

Effects of Vaccination on Cases of Small-pox at Tell City Hospital.

No.	NAME.	AGE.	VACCINATED OR NOT.	REMARKS.	COMPLICATIONS.
*1	Bolin, Melinda E.	30	Not vaccinated	Confluent form	Boils.
2	Bolin, Mary Ann	5	Vaccinated	Mild case	Boils.
3	Bolin, Pros	41	Vaccinated	Well marked case.	
*4	Fulkerson, S. W.	60	Vaccinated	Mild case—abortive form	Gumboils.
5	Fulkerson, Mrs. Mary	39	Not vaccinated	Confluent form	Boils.
*6	Fulkerson, Levy	15	Vaccinated	Mild case	Boils.
7	Fulkerson, Frank	7	Vaccinated	Mild case	
8	Fulkerson, Robert	12	Vaccinated	Mild case	
9	Fulkerson, Raeliel	4	Vaccinated	Well marked case.	
*10	Fulkerson, Ephraim	10	Vaccinated	Confluent form—bad case	
*11	Fulkerson, Sarah	8	Vaccination did not take well	Confluent form—died 12th day of eruption	Syphilis.
*12	Montgomery, Abe, colored	25	Not vaccinated	Confluent on face	Gumboils.
*13	Montgomery, Annie, colored	25	Vaccination 12 years old	Confluent on face	
*14	Montgomery, Flora, colored	6	Vaccinated	Mild case	Boils.
15	Montgomery, W. L. colored	4	Vaccinated	Mild case	
16	Montgomery, Mary, colored	1 ¹ / ₂	Vaccinated	Hemorrhagic form—died 8th day	Pneumonia.
*17	Ross, Mrs. Lizzie, colored	39	Not vaccinated		

Cases marked with * were all severe and some of them serious. Two being fatal.

W. H. MUELCHL, M. D.,
Superintendent.

From the preceding table we see that of the four cases not vaccinated all were severe, and two of them proved fatal. In the three remaining confluent cases one had been vaccinated twelve years ago, and refused to be revaccinated, one did not take well, and the third had been exposed too long before vaccination. Cases four and ten were two in which vaccination was slow in taking, the persons in the meantime being constantly exposed to infection. Every case that was recently and well vaccinated was mild in nature. In case five (Mrs. Fulkerson), the papules never developed into vesicles or postules, but were abortive, remaining as hard knots for several days, then disappearing.

Thus we had—

Confluent cases	7
Well marked cases	2
Mild cases	7
Abortive form	1
Total	17
Deaths	2
Recoveries	15

William Bolin, aged 16 years; John Bolin, aged 12 years; Jane Bolin, aged 9 years, and Truman Bolin, aged 2½ years, were all recently and well vaccinated, and though being quarantined and afterwards removed to the Hospital with the others, they never developed any signs or symptoms of small-pox whatever. Nothing but timely and successful vaccination had saved them from contracting this dreadful disease. This again proves to us conclusively that vaccination is a success, both in preventing an attack of small-pox and in moderating its severity where it can not be wholly prevented. In the face of these facts it appears as folly for any person to resist vaccination; yet there are such.

SOME TROUBLES AND DIFFICULTIES AT HOSPITAL.

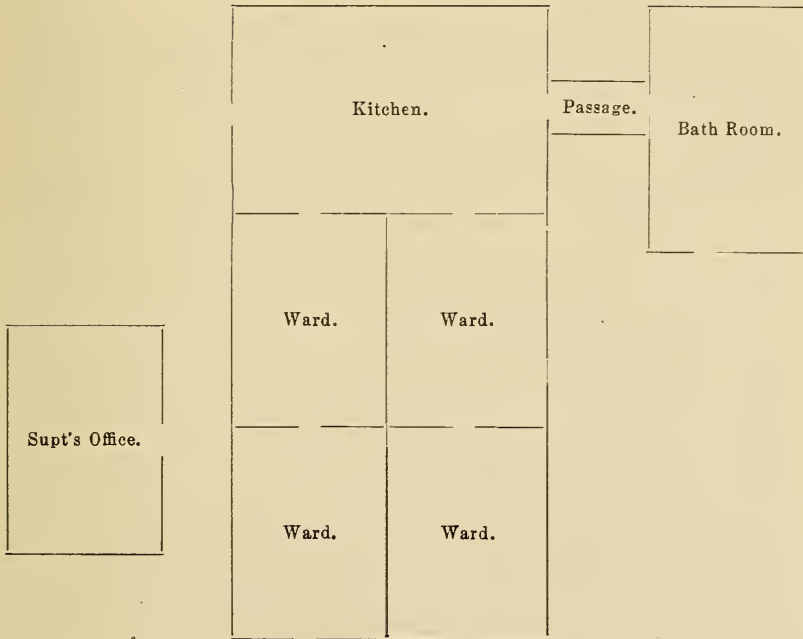
On May 1, Annie Montgomery, our cook, was taken down by the disease. She had been vaccinated twelve years ago, showing a plain scar, and, therefore, refused to be vaccinated. Bob Ray then took charge of the kitchen, and made us a very good and efficient cook.

On May 4, Henry Moser, nurse, and his brother, John Moser, guard, were found missing. They had grown sick and tired of the work at the Hospital, and left in the dead of the night while a patient lay dying on her couch. We were surprised to find them gone, for the two men had done their duty well and faithfully. The two fugitives were hunted down by the City Health Officer and thoroughly disinfected, and provided with fresh clothing.

Mrs. Margareth Montgomery, an old colored lady, now nursed her daughter-in-law and grandchildren, and G. W. Board, a colored man, was hired as guard and to assist in the kitchen and nursing.

Mrs. Montgomery arrived at Hospital May 2, and was discharged May 27; G. W. Board arrived May 4, and was discharged May 25.

PLAN AND ARRANGEMENT OF HOSPITAL.



The Hospital was a one-story frame building constructed of up-and-down boards, well battled, with matched floors and partitions and sheet iron roof. Office constructed of same material,

all in two and a half days. It is located on the hill south-east of the city. At the foot of the hill, about three hundred feet from Hospital, a well was dug which furnished plenty of fresh and wholesome water.

METHOD OF BURIAL.

Dr. Wm. Cluthe, Health Officer, furnished us with a sufficient quantity of dry sawdust and sulphur flour. A quantity of sawdust was first put into the coffin, then a layer of sulphur, next the corpse wrapped in cloths wrung out in a strong bichloride solution was placed into the coffin and sawdust and sulphur packed around it until the coffin was full. A grave six feet deep was dug, the coffin placed into this, cover removed, the sawdust and sulphur ignited. After this had been allowed to burn briskly for a time the cover was replaced and the grave filled up and a solution of bichloride sprinkled some distance around it.

Dr. Cluthe advanced the idea that by igniting the sawdust the sulphur would melt, and in cooling unite with the remaining sawdust and form a crust around the dead body, thus almost hermetically sealing it up. However, we did not return to investigate.

At the burial of Mrs. Ross we were somewhat in a dilemma. The two Mosers had ran away, and this left no one but Mr. Ray, the cook, and myself to attend to the sick and dead. At about noon Dr. Cluthe succeeded in procuring the services of G. W. Board, and sent him out to us. Together we three then prepared the large, heavy body and placed it in the coffin, surrounded it with sawdust and carried it some six hundred feet down the hill to where the grave had been dug, and properly buried it. However, the exertion was a little too much for us, and the next day we were all three sick, so that for several days I feared that I would be attacked by the disease myself. Mr. Ray and Mr. Board had both had the disease during the late war while in the army, while I had nothing to protect me against an attack except a fresh scar from vaccination. Luckily we all three escaped.

VISITS BY HEALTH OFFICERS.

On Sunday, April 28th, Dr. C. N. Metcalf, Secretary of the State Board of Health, visited the hospital and examined the patients. He immediately pronounced all cases present as small-pox without the shadow of a doubt. He then returned to the city and visited all the infected houses there and examined the suspected cases. All of these were also diagnosed as small-pox and the City Health Officer, Dr. Wm. Cluthe, was advised to send them to the Hospital as soon as possible.

It seems, however, that a number of our citizens still doubted the correctness of the diagnosis, and in order to satisfy themselves, secured Dr. LaHarty, of Evansville, to come and examine the cases still lingering at the Schweizer Hall. He came, and after thoroughly examining each case, he, too, pronounced it small-pox.

On Wednesday, May 15th, Dr. C. N. Metcalf again visited the Hospital, bringing with him Dr. D. C. Ramsey, of Mt. Vernon, a member of the State Board of Health. Together they passed through the four wards of the Hospital and examined every patient. Dr. Ramsey without hesitation verified the diagnosis in each case. They then returned to the city, and finding no new cases or suspects there, they declared it perfectly safe for the neighboring towns and cities to raise the quarantine. In fact this had already been done by all except Cannelton, and it followed the next day, May 16th.

Dr. Wm. Cluthe, City Health Officer, called at the "talking board" on an average of three to four times per week to keep himself posted as to the condition of patients and to offer suggestions as to treatment, etc. He did all in his power to keep us well supplied with everything we needed at the Hospital.

Dr. C. M. Brucker, too, made a number of visits at the "talking board" until the day of his resignation, April 25th. The "talking board" was a small blackboard placed about five hundred feet from the Hospital and used as a means for communication.

On May 30th, Dr. Wm. Cluthe, City Health Officer, called at the "talking board" and swore in S. W. Fulkerson as guard to take full charge of the Hospital and its inmates still remaining from June 1st. He to remain until all patients are finally

dismissed and the Hospital and grounds thoroughly cleansed and disinfected.

On Saturday evening, June 1st, Robert Ray and myself were released after serving forty days. Our hair and beard were closely cropped, the entire person thoroughly bathed with soap and hot water and then disinfected with a solution of corrosive sublimate, about 1-500. Then dressed in fresh clothing from head to foot and allowed to return to our families. The above method of disinfection was adhered to in every case.

S. W. Fulkerson then took charge of the Hospital and inmates. The latter consisting of five patients not yet ready to be dismissed and eleven others who were well but had no place to go.

Our sincere thanks are due Dr. Wm. Cluthe, Dr. C. M. Brucker and the City Council for willingness with which they fulfilled our every wish and desire and the promptness with which they supplied us with medicines, food and clothing.

INDIANAPOLIS, IND., August 31, 1895.

C. N. METCALF, ESQ., *Secretary, etc.*:

DEAR SIR—Answering your communication in regard to the act of 1891, making an appropriation of \$5,000 annually for the State Board of Health, and the act of 1895, making an appropriation for the same purpose, I beg to say that in my judgment the only amount available is that appropriated by the latter act.

Section 1 of the act of 1895, page 304, provides as follows: "Such sums so appropriated shall be held to include all appropriations made or expenditures authorized by any existing law for said terms on account of officers, offices, institutions and services herein named."

Item 11, page 308, makes specific appropriation for the Department of Health, as therein set forth.

Section 4 provides "that all laws and parts of laws inconsistent with the provisions of this act are hereby repealed."

The act of 1891, providing for the appropriation of \$5,000, section 13, page 19, of the act of 1891, is, in my judgment, inconsistent with the act of 1895, and the latter act therefore prevails.

Respectfully submitted,

WILLIAM A. KETCHAM,
Attorney-General.

INDIANAPOLIS, IND., January 29, 1896.

DR. C. N. METCALF, *Secretary State Board of Health*:

DEAR SIR—Recurring to the letter to you from Dr. Hibberd, of January 25, inquiring in regard to the method of promulgation of the rules of the State Board of Health, I beg to suggest that, in my opinion, the State Board ought to formally adopt a rule prescribing the method in which its rules adopted should be promulgated by the local Boards. Probably the best method of doing this is by directing the County Board to require them to be published in a newspaper of general circulation. I think it unfortunate that the statute itself does not provide the method of promulgation, but it is clear that it does not, and inasmuch as some notice must certainly be given in order that people interested may be affected by it, I think the best course to pursue is to make provision through a formal rule adopted by your Board—answering the specific questions, namely:

1. "Do you consider the sending of copies of your rules and regulations to County Health Officers all the promulgation the State Board has to make?"

I should say, "No."

2. "Do you consider the mailing of copies of your rules and regulations to all the doctors in the county a promulgation of them as contemplated by the ninth section of the act of February 19, 1891."

I should say, "No."

Kuntz v. Sumption, 117 Ind. 1, is conclusive on the proposition—

(1) That notice is an essential element of the due process of law.

(2) That the notice must be not simply accidental or fortuitous but must be authorized, and there being no specific requirement in the statute the only manner in which a general requirement can be made as it seems to me is by a proper order of the State Board prescribing the methods in which the County Boards shall promulgate or publish their rules. I would recommend that the rules should provide that formal publication should be made for three weeks successively in some

newspaper of general publication printed and published in each county wherein the rules are to be promulgated and that in sending out the rules it should be suggested by your Board to the County Boards that it would be wise to call the attention of the practicing physicians throughout the county to the rules and the publication but not to provide in your rules for that as an imperative requirement as otherwise the result would be to embarrass rather than to assist in the administration of the matters committed to your Board. I have the honor to be,

Yours very truly,

WILLIAM A. KETCHAM.

Attorney-General.

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